



Federal Trade Commission Report

"TAR", NICOTINE AND CARBON MONOXIDE OF THE SMOKE OF 208 VARIETIES OF DOMESTIC CIGARETTES

MARCH 1983

PM3001060792

REPORT OF "TAR", NICOTINE AND CARBON MONOXIDE CONTENT OF THE SMOKE OF 208 VARIETIES OF DOMESTIC CIGARETTES

March 1983

The Federal Trade Commission's Laboratory has determined the "tar" (dry particulate matter), total alkaloid (reported as nicotine) and carbon monoxide content of 208 varieties of cigarettes. The Laboratory utilized the Cambridge filter method with the following specifications as set forth in the Commission's announcement of July 31, 1967 and July 10, 1980:

1. Smoke cigarettes to a 23 mm. butt length, or to the length of the filter and overwrap plus 3 mm. if in excess of 23 mm.
2. Base results on a test of approximately 90 cigarettes per brand, or type.
3. Cigarettes to be tested will be selected on a random basis, as opposed to "weight selection".
4. Determine particulate matter on a "dry" basis employing the gas chromatography method published by C. H. Sigan and B. J. Sublett in *Tobacco Science* 9, page 70, 1965, as modified by F. J. Schultz and A. W. Spears' report published in *Tobacco*, Vol. 162, No. 24, page 32, date June 17, 1966, to determine the moisture content.
5. Determine and report the "tar" content after subtracting moisture and alkaloids (as nicotine) from particulate matter.
6. Carbon Monoxide is determined by non-dispersal infrared spectrophotometer.

Concerning the 208 varieties tested, 15 were capable of being smoked to 23 mm. The butt length of the other 193 varieties tested ranged from 24.3 mm. to an average of between 40.3 to 44.0 mm. The butt length of 169 of the 208 varieties tested exceeded 30 mm.

The samples used were obtained by attempting to purchase two packages of each variety of cigarettes as distributed by domestic cigarette manufacturers during December 1981 through February 1982 in each of 50 geographic locations throughout the country. Not all varieties of cigarettes were available in each of the 50 geographic locations and in these instances, one or more additional packages of cigarettes were purchased in those geographic locations where respective varieties were available. The samples utilized in the tests were representative of the 208 varieties of cigarettes as available throughout the country at the time of purchase.

In the table listing the cigarette varieties in alphabetical order the "tar" and carbon monoxide content is reported to the nearest 0.1 milligram and the nicotine to the nearest 0.01 milligram, each with

appropriate statistical values. The average weight is reported in grams per cigarette and the butt length range to the nearest 0.1 millimeter. In all other tables the average weight and butt length columns and the figures representing the standard deviation of the mean have been eliminated. The "tar" and carbon monoxide figures have been rounded to the nearest milligram (0.5 milligrams and greater rounded up, 0.4 milligrams and less rounded down) and the nicotine figures have been rounded to the nearest tenth of a milligram (0.05 milligrams and greater rounded up, 0.04 milligrams and less rounded down). Three tables respectively list varieties in increasing order of "tar" values, in increasing order of nicotine values and in increasing order of carbon monoxide values. Accordingly, "tar", nicotine and carbon monoxide figures in the tables represent rounded off averages without indication of their precision.

It should be noted that cigarette brands with assay results for "tar" and carbon monoxide below 0.5 mg. per cigarette and for nicotine below 0.05 mg. per cigarette are recorded in the accompanying tables as <0.5 mg. "tar", <0.05 mg. nicotine and <0.5 mg. carbon monoxide. The tables do not differentiate between these cigarettes because the current, approved testing methodology is not sensitive enough to differentiate between cigarettes at these levels.

The various test results for all brands of Barclay cigarettes have been reported with an asterisk (*) in the tables within this Report as they were in the Report of December 1981, because a controversy continues to exist as to whether the FTC testing methodology understates the "tar", nicotine and carbon monoxide delivery of Barclay cigarettes. On June 25, 1982, following an investigation, the Commission determined that its current cigarette testing methodology does not measure accurately the "tar", nicotine and CO delivery of Barclay cigarettes. The Commission's decision is currently the subject of a pending court suit filed by Brown & Williamson Tobacco Corporation, manufacturer of Barclay.

The Commission has also found that there is a significant likelihood that the same problem (namely, an inaccurate reporting of the "tar", nicotine and CO delivery) exists with respect to Kool Ultra and Kool Ultra 100's, two other brands of cigarettes manufactured by Brown & Williamson. However, the Commission has not concluded at this time that Kool Ultra and Kool Ultra 100's are ranked inappropriately. Three asterisks (***) have been appended to the test scores for Kool Ultra and Kool Ultra 100's in this report to indicate this controversy.

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**TAR^①, NICOTINE^② AND CARBON MONOXIDE CONTENT
OF TWO HUNDRED-EIGHT (208) VARIETIES OF DOMESTIC CIGARETTES**

| BRAND | TYPE ^③ | AVERAGE WEIGHT ^④ | BUTT LENGTH ^⑤ | TPM DRY ^⑥ | NICOTINE ^⑦ | CARBON MONOXIDE |
|------------------------------|-------------------|--------------------------------|-----------------------------|----------------------|-----------------------|--------------------|
| Alpine | F;SP;M 85mm | 0.9653 | 28.4—29.8mm | 14.1 ± 0.2 | 0.86 ± 0.02 | 13.6 ± 0.2 |
| Barclay* | F;HP 80mm | 0.8165 | 33.9—36.5mm | 1.4 ± 0.3 | 0.17 ± 0.04 | 1.2 ± 0.3 |
| Barclay* | F;SP 85mm | 0.8499 | 34.1—35.7mm | 0.7 ± 0.2 | 0.11 ± 0.01 | 0.6 ± 0.1 |
| Barclay* | F;SP;M 85mm | 0.8878 | 32.0—35.9mm | 1.1 ± 0.1 | 0.11 ± 0.02 | 1.2 ± 0.2 |
| Barclay* | F;SP 100mm | 1.0736 | 37.9—40.9mm | 3.2 ± 0.2 | 0.31 ± 0.02 | 2.5 ± 0.2 |
| Barclay* | F;SP;M 100mm | 1.0563 | 38.5—40.3mm | 3.3 ± 0.2 | 0.31 ± 0.02 | 2.8 ± 0.2 |
| Belair | F;SP;M 85mm | 0.9451 | 32.2—34.5mm | 9.0 ± 0.3 | 0.72 ± 0.03 | 9.8 ± 0.3 |
| Belair 100's | F;SP;M 100mm | 1.1372 | 37.8—40.3mm | 9.5 ± 0.2 | 0.69 ± 0.03 | 11.4 ± 0.4 |
| Benson & Hedges | R;F;HP 70mm | 0.9808 | 32.2—33.4mm | 0.9 ± 0.2 | 0.10 ± 0.01 | 1.5 ± 0.1 |
| Benson & Hedges | F;HP 85mm | 1.0103 | 32.0—33.3mm | 16.0 ± 0.4 | 1.21 ± 0.03 | 13.1 ± 0.4 |
| Benson & Hedges 100's | F;HP 100mm | 1.0938 | 34.3—35.4mm | 16.0 ± 0.3 | 1.06 ± 0.03 | 15.5 ± 0.4 |
| Benson & Hedges 100's | F;HP;M 100mm | 1.1252 | 34.1—35.4mm | 16.3 ± 0.4 | 1.05 ± 0.03 | 15.3 ± 0.3 |
| Benson & Hedges 100's | F;SP 100mm | 1.1185 | 33.9—35.7mm | 16.8 ± 0.5 | 1.12 ± 0.03 | 16.3 ± 0.5 |
| Benson & Hedges 100's | F;SP;M 100mm | 1.1243 | 34.0—35.5mm | 16.5 ± 0.3 | 1.12 ± 0.02 | 15.2 ± 0.3 |
| Benson & Hedges Lights 100's | F;HP 100mm | 1.1041 | 38.3—39.5mm | 11.4 ± 0.4 | 0.80 ± 0.03 | 12.9 ± 0.4 |
| Benson & Hedges Lights 100's | F;HP;M 100mm | 1.1146 | 38.0—39.4mm | 10.9 ± 0.3 | 0.80 ± 0.03 | 12.2 ± 0.3 |
| Benson & Hedges Lights 100's | F;SP 100mm | 1.1197 | 37.2—41.0mm | 10.6 ± 0.4 | 0.79 ± 0.04 | 13.0 ± 0.4 |
| Benson & Hedges Lights 100's | F;SP;M 100mm | 1.1144 | 38.1—39.8mm | 10.7 ± 0.3 | 0.76 ± 0.02 | 12.0 ± 0.4 |
| Bull Durham | F;SP 85mm | 1.1650 | 24.3—29.2mm | 29.8 ± 0.6 | 2.03 ± 0.04 | 23.5 ± 0.4 |
| Cambridge | F;HP 85mm | 0.8567 | 38.3—39.0mm | .. | .. | .. |
| Cambridge | F;SP 85mm | 0.8435 | 34.1—37.0mm | 0.7 ± 0.1 | 0.10 ± 0.01 | 1.2 ± 0.1 |
| Cambridge 100's | F;SP 100mm | 0.9783 | 37.2—39.8mm | 3.3 ± 0.2 | 0.33 ± 0.01 | 5.1 ± 0.2 |
| Camel | R;NF;SP 70mm | 0.8527 | 23.0mm | 20.1 ± 0.4 | 1.28 ± 0.02 | 12.2 ± 0.3 |
| Camel | F;SP 85mm | 0.9546 | 27.4—28.4mm | 15.4 ± 0.2 | 1.02 ± 0.03 | 15.2 ± 0.4 |
| Camel Lights | F;HP 80mm | 0.9055 | 28.6—30.5mm | 7.6 ± 0.3 | 0.68 ± 0.02 | 7.7 ± 0.3 |
| Camel Lights | F;SP 85mm | 0.9280 | 32.4—33.9mm | 8.0 ± 0.2 | 0.67 ± 0.03 | 10.2 ± 0.4 |
| Camel Lights 100's | F;SP 100mm | 1.1187 | 36.1—38.6mm | 12.0 ± 0.2 | 0.84 ± 0.02 | 14.8 ± 0.4 |
| Carlton | F;HP 85mm | 0.8129 | 38.0—39.9mm | .. | .. | .. |
| Carlton | F;SP 85mm | 0.8070 | 32.0—34.6mm | 0.9 ± 0.1 | 0.12 ± 0.01 | 1.6 ± 0.1 |
| Carlton | F;SP;M 85mm | 0.7928 | 32.3—34.8mm | .. | 0.08 ± 0.01 | 0.9 ± 0.1 |
| Carlton 100's | F;HP 100mm | 0.9316 | 36.5—39.7mm | 0.6 ± 0.1 | 0.09 ± 0.01 | 0.7 ± 0.1 |
| Carlton 100's | F;HP;M 100mm | 0.8834 | 37.0—38.8mm | .. | 0.07 ± 0.01 | .. |
| Carlton 100's | F;SP 100mm | 0.9486 | 33.3—36.3mm | 4.1 ± 0.3 | 0.41 ± 0.02 | 5.6 ± 0.3 |
| Carlton 100's | F;SP;M 100mm | 0.9462 | 33.7—37.0mm | 4.1 ± 0.3 | 0.40 ± 0.03 | 5.4 ± 0.5 |
| Carlton 120's | F;SP 120mm | 1.0043 | 36.3—39.9mm | 5.8 ± 0.2 | 0.55 ± 0.02 | 4.4 ± 0.2 |
| Carlton 120's | F;SP;M 120mm | 1.0058 | 36.9—41.0mm | 6.0 ± 0.3 | 0.57 ± 0.03 | 4.5 ± 0.3 |
| Chesterfield | R;NF;SP 70mm | 0.8637 | 23.0mm | 20.2 ± 0.4 | 1.31 ± 0.03 | 12.5 ± 0.5 |
| Chesterfield | NF;SP 85mm | 1.0299 | 23.0mm | 23.9 ± 0.7 | 1.59 ± 0.05 | 14.4 ± 0.3 |
| Chesterfield | F;SP 85mm | 0.8885 | 28.0—30.0mm | 15.0 ± 0.3 | 1.04 ± 0.04 | 15.0 ± 0.3 |
| Chesterfield 100's | F;SP 100mm | 1.0258 | 34.3—38.7mm | 15.2 ± 0.3 | 1.06 ± 0.02 | 15.6 ± 0.4 |
| Decade | F;SP 85mm | 0.8432 | 32.4—34.2mm | 5.2 ± 0.2 | 0.46 ± 0.02 | 4.8 ± 0.3 |
| Decade | F;SP;M 85mm | 0.8505 | 32.3—34.3mm | 5.0 ± 0.3 | 0.44 ± 0.02 | 4.4 ± 0.3 |
| Decade 100's | F;SP 100mm | 0.9596 | 37.5—39.3mm | 8.1 ± 0.2 | 0.75 ± 0.02 | 6.2 ± 0.3 |
| Doral II | F;SP 85mm | 1.0443 | 36.5—38.5mm | 4.3 ± 0.3 | 0.40 ± 0.03 | 3.8 ± 0.3 |
| Doral II | F;SP;M 85mm | 1.0307 | 35.1—39.0mm | 4.1 ± 0.3 | 0.39 ± 0.02 | 3.5 ± 0.2 |
| DuMaurier | F;HP 85mm | 0.9894 | 27.9—30.5mm | 15.8 ± 0.3 | 1.02 ± 0.03 | 17.7 ± 0.4 |
| English Ovals | R;NF;HP 70mm | 0.9004 | 23.0mm | 23.2 ± 0.4 | 1.69 ± 0.04 | 12.1 ± 0.3 |
| English Ovals | NF;HP 85mm | 1.1437 | 23.0mm | 26.7 ± 0.7 | 2.03 ± 0.07 | 13.4 ± 0.5 |
| Eve Lights 100's | F;SP 100mm | 0.9633 | 36.9—39.9mm | 12.6 ± 0.4 | 0.87 ± 0.03 | 13.4 ± 0.6 |
| Eve Lights 100's | F;SP;M 100mm | 0.9703 | 37.6—39.0mm | 12.5 ± 0.4 | 0.97 ± 0.02 | 12.9 ± 0.4 |
| Eve Lights 120's | F;HP 120mm | 0.9717 | 36.9—39.4mm | 13.5 ± 0.5 | 1.10 ± 0.02 | 10.9 ± 0.5 |
| Eve Lights 120's | F;HP;M 120mm | 0.9891 | 36.6—39.1mm | 13.6 ± 0.4 | 1.11 ± 0.03 | 10.8 ± 0.4 |
| Galaxy | F;HP 85mm | 1.0899 | 32.3—33.7mm | 15.7 ± 0.3 | 0.89 ± 0.02 | 16.0 ± 0.3 |
| Golden Lights | F;SP 85mm | 0.8616 | 32.2—36.8mm | 7.9 ± 0.3 | 0.70 ± 0.03 | 8.6 ± 0.5 |
| Golden Lights | F;SP;M 85mm | 0.8666 | 33.9—37.1mm | 8.7 ± 0.3 | 0.76 ± 0.03 | 9.3 ± 0.3 |
| Golden Lights 100's | F;SP 100mm | 1.0267 | 36.1—39.8mm | 8.8 ± 0.3 | 0.78 ± 0.02 | 9.0 ± 0.6 |
| Golden Lights 100's | F;SP;M 100mm | 1.0253 | 36.3—39.5mm | 8.3 ± 0.4 | 0.75 ± 0.02 | 8.4 ± 0.5 |

① TPM dry (tar)—milligrams total particulate matter less nicotine and water.

② Milligrams total alkaloids reported as nicotine.

③ R—regular; F—filter; NF—non-filter; M—menthol; HP—hard pack; SP—soft pack; mm—millimeter.

④ Average weight reported in grams.

⑤ Range used in butt length because of variance of overwrap.

⑥ Tolerance shown is twice the standard deviation.

* See statement in text concerning Barclay.

** Below the sensitivity of the method.

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| BRAND | TYPE ^③ | AVERAGE WEIGHT ^④ | BUTT LENGTH ^⑤ | TPM DRY ^{①②} | NICOTINE ^⑥ | CARBON MONOXIDE |
|-------------------------|-------------------|-----------------------------|--------------------------|-----------------------|-----------------------|-----------------|
| Ha'i & Ha'i | F;SP 85mm | 1.1249 | 25.5—29.1mm | 17.5 ± 0.5 | 1.39 ± 0.05 | 16.5 ± 0.5 |
| Herbert Tareyton | NF;SP 85mm | 1.1308 | 23.0mm | 27.9 ± 0.6 | 1.82 ± 0.05 | 18.7 ± 0.7 |
| Iceberg 100's | F;SP;M 100mm | 0.9414 | 33.7—38.5mm | 2.6 ± 0.1 | 0.27 ± 0.02 | 3.5 ± 0.2 |
| Kent | F;HP 80mm | 0.8927 | 27.5—28.6mm | 12.7 ± 0.2 | 0.93 ± 0.02 | 12.7 ± 0.3 |
| Kent | F;SP 85mm | 0.9225 | 27.4—29.3mm | 12.4 ± 0.4 | 0.95 ± 0.03 | 12.3 ± 0.5 |
| Kent III | F;SP 85mm | 0.8325 | 33.5—37.1mm | 2.4 ± 0.2 | 0.28 ± 0.03 | 2.4 ± 0.2 |
| Kent 100's | F;SP 100mm | 1.0614 | 34.0—37.1mm | 14.2 ± 0.3 | 1.08 ± 0.03 | 13.2 ± 0.4 |
| Kent 100's | F;SP;M 100mm | 1.0508 | 33.0—36.1mm | 14.9 ± 0.4 | 1.22 ± 0.03 | 13.5 ± 0.3 |
| Kent III 100's | F;SP 100mm | 0.9845 | 37.4—39.3mm | 4.7 ± 0.2 | 0.49 ± 0.02 | 6.3 ± 0.2 |
| Kool | R;NF;SP;M 70mm | 0.8923 | 23.0mm | 18.4 ± 0.6 | 1.03 ± 0.03 | 13.9 ± 0.7 |
| Kool | F;HP;M 80mm | 0.9433 | 25.6—27.0mm | 16.1 ± 0.4 | 1.10 ± 0.03 | 16.8 ± 0.5 |
| Kool | F;SP;M 85mm | 0.9372 | 27.7—29.1mm | 16.6 ± 0.3 | 1.12 ± 0.03 | 15.3 ± 0.4 |
| Kool Lights | F;SP;M 85mm | 0.9232 | 32.1—33.5mm | 8.9 ± 0.3 | 0.67 ± 0.02 | 10.5 ± 0.3 |
| Kool Milds | F;SP;M 85mm | 0.8923 | 30.9—33.7mm | 11.4 ± 0.2 | 0.81 ± 0.03 | 12.8 ± 0.4 |
| Kool Super Lights | F;SP;M 85mm | 0.9072 | 32.8—33.2mm | 6.0 ± 0.3 | 0.50 ± 0.02 | 6.4 ± 0.3 |
| Kool Ultra*** | F;SP;M 85mm | 0.9119 | 33.8—36.2mm | 1.7 ± 0.2 | 0.16 ± 0.02 | 1.3 ± 0.2 |
| Kool Super Longs 100's | F;SP;M 100mm | 1.0634 | 33.8—35.5mm | 14.2 ± 0.3 | 0.95 ± 0.03 | 16.1 ± 0.3 |
| Kool Lights 100's | F;SP;M 100mm | 1.0880 | 37.9—38.5mm | 11.2 ± 0.3 | 0.86 ± 0.03 | 11.1 ± 0.4 |
| Kool Milds 100's | F;SP;M 100mm | 1.1168 | 37.5—40.4mm | 12.0 ± 0.4 | 0.88 ± 0.03 | 13.9 ± 0.5 |
| Kool Super Lights 100's | F;SP;M 100mm | 1.1304 | 38.4—40.6mm | 9.4 ± 0.3 | 0.66 ± 0.02 | 11.7 ± 0.4 |
| Kool Ultra 100's*** | F;SP;M 100mm | 1.0840 | 37.0—39.2mm | 4.3 ± 0.4 | 0.40 ± 0.04 | 3.7 ± 0.4 |
| L & M | F;HP 80mm | 0.8260 | 26.2—29.6mm | 14.4 ± 0.3 | 0.95 ± 0.02 | 14.8 ± 0.4 |
| L & M | F;SP 85mm | 0.8858 | 28.9—33.6mm | 14.9 ± 0.3 | 1.02 ± 0.03 | 15.4 ± 0.3 |
| L & M Lights | F;SP 85mm | 0.8302 | 32.2—33.5mm | 8.5 ± 0.3 | 0.79 ± 0.02 | 7.1 ± 0.3 |
| L & M 100's | F;SP 100mm | 1.0116 | 37.2—39.4mm | 15.2 ± 0.4 | 1.09 ± 0.03 | 16.4 ± 0.5 |
| L & M Lights 100's | F;SP 100mm | 0.9321 | 37.5—38.9mm | 8.1 ± 0.2 | 0.81 ± 0.02 | 6.2 ± 0.2 |
| L & M Lights 100's | F;SP;M 100mm | 0.9392 | 36.9—39.3mm | 7.7 ± 0.3 | 0.76 ± 0.02 | 5.5 ± 0.2 |
| Lark | F;SP 85mm | 0.9833 | 27.3—28.7mm | 15.2 ± 0.5 | 1.13 ± 0.04 | 14.3 ± 0.5 |
| Lark Lights | F;SP 85mm | 0.9643 | 32.5—33.6mm | 13.7 ± 0.2 | 1.01 ± 0.02 | 13.0 ± 0.3 |
| Lark 100's | F;SP 100mm | 1.1204 | 32.2—33.8mm | 16.0 ± 0.3 | 1.22 ± 0.03 | 15.3 ± 0.4 |
| Lark Lights 100's | F;SP 100mm | 1.1283 | 37.3—38.6mm | 14.7 ± 0.3 | 1.12 ± 0.03 | 14.2 ± 0.4 |
| Long Johns 120's | F;SP 120mm | 1.1913 | 36.7—39.0mm | 19.2 ± 0.6 | 1.53 ± 0.06 | 19.1 ± 0.9 |
| Long Johns 120's | F;SP;M 120mm | 1.1584 | 35.5—39.8mm | 15.4 ± 0.5 | 1.28 ± 0.04 | 16.4 ± 0.6 |
| Lucky Strike | R;NF;SP 70mm | 0.8961 | 23.0mm | 23.9 ± 0.7 | 1.47 ± 0.04 | 16.3 ± 0.5 |
| Lucky Ten | F;SP 85mm | 0.9510 | 31.8—34.5mm | 8.7 ± 0.3 | 0.70 ± 0.03 | 10.6 ± 0.4 |
| Lucky 100's | F;SP 100mm | 0.9581 | 32.1—39.1mm | 3.2 ± 0.2 | 0.31 ± 0.02 | 4.5 ± 0.2 |
| Marlboro | F;HP 80mm | 0.9504 | 25.1—27.0mm | 16.4 ± 0.3 | 1.06 ± 0.03 | 14.9 ± 0.3 |
| Marlboro | F;HP;M 80mm | 0.9316 | 25.6—26.0mm | 15.1 ± 0.4 | 0.90 ± 0.02 | 14.4 ± 0.6 |
| Marlboro | F;SP 85mm | 0.9865 | 27.2—29.1mm | 16.9 ± 0.3 | 1.07 ± 0.02 | 15.2 ± 0.4 |
| Marlboro | F;SP;M 85mm | 0.9580 | 28.6—30.1mm | 14.6 ± 0.3 | 0.86 ± 0.02 | 14.3 ± 0.4 |
| Marlboro Lights | F;HP 85mm | 0.9425 | 33.1—34.8mm | 10.4 ± 0.3 | 0.71 ± 0.02 | 11.6 ± 0.3 |
| Marlboro Lights | F;SP 85mm | 0.9616 | 32.4—35.1mm | 11.2 ± 0.2 | 0.78 ± 0.02 | 12.6 ± 0.4 |
| Marlboro 100's | F;HP 100mm | 1.0979 | 33.8—35.5mm | 17.0 ± 0.4 | 1.12 ± 0.03 | 16.8 ± 0.4 |
| Marlboro 100's | F;SP 100mm | 1.1139 | 33.5—35.1mm | 16.9 ± 0.3 | 1.12 ± 0.02 | 16.4 ± 0.3 |
| Marlboro Lights 100's | F;SP 100mm | 1.1133 | 38.0—39.7mm | 11.0 ± 0.3 | 0.82 ± 0.02 | 12.8 ± 0.5 |
| Max 120's | F;SP 120mm | 0.9907 | 36.6—38.9mm | 18.9 ± 0.4 | 1.50 ± 0.05 | 17.9 ± 0.5 |
| Max 120's | F;SP;M 120mm | 0.9950 | 36.6—38.9mm | 18.3 ± 0.4 | 1.48 ± 0.02 | 16.7 ± 0.3 |
| Merit | F;SP 85mm | 0.9622 | 34.1—36.1mm | 8.2 ± 0.2 | 0.58 ± 0.02 | 10.6 ± 0.2 |
| Merit | F;SP;M 85mm | 0.9705 | 34.5—36.1mm | 7.8 ± 0.2 | 0.57 ± 0.02 | 10.0 ± 0.3 |
| Merit Ultra Lights | F;SP 85mm | 0.9107 | 33.8—36.0mm | 3.6 ± 0.2 | 0.33 ± 0.02 | 4.2 ± 0.2 |
| Merit Ultra Lights | F;SP;M 85mm | 0.9107 | 34.3—36.5mm | 3.4 ± 0.1 | 0.28 ± 0.03 | 3.7 ± 0.2 |
| Merit 100's | F;SP 100mm | 1.1051 | 38.0—40.1mm | 10.8 ± 0.4 | 0.74 ± 0.02 | 12.7 ± 0.4 |
| Merit 100's | F;SP;M 100mm | 1.1113 | 37.7—40.0mm | 9.4 ± 0.2 | 0.68 ± 0.02 | 11.3 ± 0.4 |
| Montclair | F;SP;M 85mm | 0.9057 | 25.8—28.6mm | 15.2 ± 0.4 | 0.99 ± 0.04 | 15.5 ± 0.3 |
| More Lights 100's | F;HP 100mm | 0.9190 | 37.2—39.1mm | 8.6 ± 0.4 | 0.68 ± 0.02 | 8.2 ± 0.4 |
| More Lights 100's | F;HP;M 100mm | 0.8712 | 35.7—39.8mm | 7.5 ± 0.3 | 0.63 ± 0.02 | 9.3 ± 0.4 |
| More 120's | F;SP 120mm | 1.0196 | 41.0—43.2mm | 17.3 ± 0.4 | 1.23 ± 0.03 | 21.0 ± 0.7 |
| More 120's | F;SP;M 120mm | 1.0174 | 40.3—44.0mm | 15.7 ± 0.5 | 1.23 ± 0.03 | 19.3 ± 0.7 |
| Multifilter | F;SP 85mm | 1.1297 | 31.9—33.9mm | 12.4 ± 0.3 | 0.82 ± 0.02 | 11.6 ± 0.3 |
| Multifilter | F;SP;M 85mm | 1.1240 | 32.5—33.9mm | 11.4 ± 0.5 | 0.78 ± 0.03 | 10.2 ± 0.5 |
| Newport | F;HP;M 80mm | 0.8623 | 27.3—29.6mm | 15.5 ± 0.4 | 1.10 ± 0.03 | 16.4 ± 0.5 |

① TPM dry (tar)—milligrams total particulate matter less nicotine and water.

② Milligrams total alkaloids reported as nicotine.

③ R—regular; F—filter; NF—non-filter; M—menthol; HP—hard pack; SP—soft pack; mm—millimeter.

④ Average weight reported in grams.

⑤ Range used in butt length because of variance of overwrap.

⑥ Tolerance shown is twice the standard deviation.

** Below the sensitivity of the method.

*** See statement in text concerning Kool Ultra.

PM3001060795

| BRAND | TYPE ^① | AVERAGE WEIGHT ^② | BUTT LENGTH ^③ | TPM DRY ^④ | NICOTINE ^⑤ | CARBON MONOXIDE |
|------------------------------|-------------------|-----------------------------|--------------------------|----------------------|-----------------------|-----------------|
| Newport | F;SP;M 85mm | 0.9179 | 27.0—30.2mm | 16.8 ± 0.4 | 1.22 ± 0.03 | 17.5 ± 0.4 |
| Newport Lights | F;HP;M 80mm | 0.8517 | 31.9—34.9mm | 9.0 ± 0.3 | 0.74 ± 0.02 | 9.5 ± 0.3 |
| Newport Lights | F;SP;M 85mm | 0.8669 | 32.4—36.4mm | 8.8 ± 0.3 | 0.73 ± 0.02 | 9.6 ± 0.3 |
| Newport Red | F;HP 80mm | 0.8800 | 32.1—33.8mm | 13.2 ± 0.2 | 1.06 ± 0.02 | 14.2 ± 0.3 |
| Newport Red | F;SP 85mm | 0.9034 | 32.0—34.3mm | 13.3 ± 0.2 | 1.04 ± 0.03 | 14.9 ± 0.3 |
| Newport 100's | F;SP;M 100mm | 1.0447 | 33.7—36.2mm | 20.1 ± 0.3 | 1.43 ± 0.03 | 19.5 ± 0.5 |
| Newport Lights 100's | F;SP;M 100mm | 1.0360 | 36.7—40.0mm | 9.2 ± 0.5 | 0.80 ± 0.04 | 9.6 ± 0.6 |
| Northwind | F;SP;M 85mm | 0.9999 | 34.7—35.7mm | 8.2 ± 0.2 | 0.57 ± 0.02 | 10.2 ± 0.2 |
| Northwind 100's | F;SP;M 100mm | 1.1452 | 38.1—40.2mm | 8.9 ± 0.3 | 0.61 ± 0.02 | 10.6 ± 0.3 |
| Now | F;HP 80mm | 0.6780 | 32.0—35.3mm | ** | ** | ** |
| Now | F;SP 85mm | 0.7851 | 35.9—38.8mm | 1.0 ± 0.1 | 0.13 ± 0.01 | 1.5 ± 0.2 |
| Now | F;SP;M 85mm | 0.7847 | 35.8—38.2mm | 0.8 ± 0.1 | 0.11 ± 0.01 | 1.2 ± 0.2 |
| Now 100's | F;HP 100mm | 0.6772 | 35.5—40.1mm | ** | ** | ** |
| Now 100's | F;SP 100mm | 0.9275 | 37.2—38.8mm | 2.1 ± 0.1 | 0.23 ± 0.01 | 1.6 ± 0.2 |
| Now 100's | F;SP;M 100mm | 0.9305 | 36.1—39.2mm | 1.9 ± 0.2 | 0.22 ± 0.02 | 1.4 ± 0.1 |
| Oasis | F;SP;M 85mm | 0.9075 | 26.9—28.9mm | 15.1 ± 0.4 | 0.98 ± 0.03 | 14.9 ± 0.4 |
| Old Gold Straight | NF;SP 85mm | 0.9859 | 23.0mm | 25.9 ± 0.5 | 1.61 ± 0.03 | 16.6 ± 0.5 |
| Old Gold Filter | F;SP 85mm | 0.9186 | 27.0—30.8mm | 17.0 ± 0.3 | 1.26 ± 0.02 | 18.5 ± 0.5 |
| Old Gold Lights | F;SP 85mm | 0.8764 | 33.1—36.6mm | 9.6 ± 0.3 | 0.85 ± 0.03 | 10.2 ± 0.4 |
| Old Gold Filter 100's | F;SP 100mm | 1.0361 | 33.9—35.8mm | 19.8 ± 0.3 | 1.49 ± 0.03 | 19.3 ± 0.3 |
| Omni 100's | F;SP;M 100mm | 1.0286 | 37.0—39.1mm | 7.6 ± 0.2 | 0.70 ± 0.02 | 6.4 ± 0.2 |
| Pall Mall | NF;SP 85mm | 1.0675 | 23.0mm | 24.3 ± 0.5 | 1.56 ± 0.03 | 16.4 ± 0.4 |
| Pall Mall | F;SP 85mm | 0.9910 | 26.3—28.4mm | 17.7 ± 0.3 | 1.21 ± 0.03 | 18.1 ± 0.5 |
| Pall Mall Extra Light | F;SP 85mm | 0.9800 | 31.9—35.0mm | 6.3 ± 0.2 | 0.59 ± 0.02 | 6.8 ± 0.2 |
| Pall Mall 100's | F;SP 100mm | 1.1067 | 33.5—36.4mm | 16.4 ± 0.3 | 1.24 ± 0.03 | 16.4 ± 0.3 |
| Pall Mall Light 100's | F;SP 100mm | 1.0906 | 35.3—39.3mm | 8.9 ± 0.3 | 0.78 ± 0.03 | 8.2 ± 0.2 |
| Pall Mall Light 100's | F;SP;M 100mm | 1.0395 | 33.3—36.2mm | 12.8 ± 0.3 | 1.05 ± 0.04 | 12.6 ± 0.3 |
| Parliament Lights | F;HP 80mm | 0.9511 | 31.6—34.3mm | 8.6 ± 0.4 | 0.64 ± 0.02 | 9.3 ± 0.4 |
| Parliament Lights | F;SP 85mm | 1.0073 | 32.0—36.2mm | 9.5 ± 0.2 | 0.69 ± 0.02 | 10.7 ± 0.4 |
| Parliament Lights 100's | F;SP 100mm | 1.2469 | 37.5—39.7mm | 11.9 ± 0.3 | 0.89 ± 0.02 | 11.2 ± 0.4 |
| Philip Morris | R;NF;SP 70mm | 0.8677 | 23.0mm | 21.6 ± 0.4 | 1.36 ± 0.04 | 12.3 ± 0.4 |
| Philip Morris Commander | NF;SP 85mm | 1.0422 | 23.0mm | 26.4 ± 0.6 | 1.69 ± 0.04 | 14.9 ± 0.4 |
| Philip Morris Intern'l 100's | F;HP 100mm | 1.0956 | 34.3—35.8mm | 17.5 ± 0.5 | 1.12 ± 0.03 | 16.0 ± 0.5 |
| Philip Morris Intern'l 100's | F;HP;M 100mm | 1.0774 | 34.6—35.9mm | 15.6 ± 0.4 | 0.98 ± 0.02 | 16.2 ± 0.4 |
| Picayune | R;NF;SP 70mm | 0.8511 | 23.0mm | 17.8 ± 0.6 | 1.15 ± 0.04 | 14.1 ± 0.6 |
| Players | R;NF;SP 70mm | 1.0357 | 23.0mm | 24.9 ± 0.5 | 1.83 ± 0.04 | 14.4 ± 0.3 |
| Raleigh | NF;SP 85mm | 1.0235 | 23.0mm | 23.0 ± 0.6 | 1.28 ± 0.04 | 16.9 ± 0.4 |
| Raleigh | F;SP 85mm | 0.9573 | 28.0—29.7mm | 15.8 ± 0.4 | 0.96 ± 0.03 | 17.5 ± 0.5 |
| Raleigh Lights | F;SP 85mm | 0.9529 | 31.4—34.2mm | 8.6 ± 0.3 | 0.69 ± 0.02 | 10.0 ± 0.5 |
| Raleigh 100's | F;SP 100mm | 1.1298 | 33.8—35.5mm | 16.7 ± 0.3 | 1.05 ± 0.02 | 18.1 ± 0.5 |
| Raleigh Lights 100's | F;SP 100mm | 1.1558 | 37.3—39.8mm | 10.0 ± 0.2 | 0.78 ± 0.02 | 12.7 ± 0.4 |
| St. Moritz 100's | F;SP 100mm | 1.0417 | 35.9—37.5mm | 14.5 ± 0.3 | 1.10 ± 0.03 | 14.5 ± 0.4 |
| St. Moritz 100's | F;SP;M 100mm | 1.0498 | 35.7—37.4mm | 14.7 ± 0.3 | 1.15 ± 0.03 | 14.6 ± 0.4 |
| Salem | F;SP;M 85mm | 0.9706 | 27.2—28.3mm | 14.7 ± 0.4 | 1.02 ± 0.02 | 13.8 ± 0.4 |
| Salem Lights | F;SP;M 85mm | 0.9533 | 33.0—35.5mm | 8.3 ± 0.2 | 0.64 ± 0.02 | 10.5 ± 0.3 |
| Salem Ultra | F;SP;M 85mm | 0.9106 | 32.2—33.7mm | 4.5 ± 0.3 | 0.42 ± 0.02 | 4.9 ± 0.3 |
| Salem 100's | F;SP;M 100mm | 1.1400 | 33.9—35.4mm | 14.9 ± 0.3 | 1.13 ± 0.03 | 13.5 ± 0.3 |
| Salem Lights 100's | F;SP;M 100mm | 1.1149 | 36.2—37.9mm | 9.5 ± 0.3 | 0.74 ± 0.02 | 11.6 ± 0.3 |
| Salem Ultra 100's | F;SP;M 100mm | 1.0796 | 36.5—39.0mm | 4.6 ± 0.2 | 0.42 ± 0.02 | 6.3 ± 0.3 |
| Saratoga 120's | F;HP 120mm | 1.0985 | 36.8—39.0mm | 15.1 ± 0.8 | 1.02 ± 0.04 | 15.8 ± 0.9 |
| Saratoga 120's | F;HP;M 120mm | 1.1164 | 37.3—40.0mm | 15.5 ± 0.4 | 1.04 ± 0.03 | 15.7 ± 0.6 |
| Silva Thins 100's | F;SP 100mm | 0.9319 | 34.0—36.0mm | 12.4 ± 0.3 | 1.09 ± 0.02 | 10.3 ± 0.3 |
| Silva Thins 100's | F;SP;M 100mm | 0.9372 | 33.7—35.6mm | 12.5 ± 0.3 | 1.10 ± 0.02 | 10.2 ± 0.3 |
| Spring 100's | F;SP 100mm | 1.0780 | 33.8—36.0mm | 20.1 ± 0.4 | 1.10 ± 0.03 | 18.0 ± 0.4 |
| Tall 120's | F;SP 120mm | 1.2116 | 36.0—39.7mm | 18.7 ± 0.6 | 1.52 ± 0.05 | 19.4 ± 0.8 |
| Tall 120's | F;SP;M 120mm | 1.1740 | 36.4—40.7mm | 16.6 ± 0.4 | 1.34 ± 0.04 | 17.6 ± 0.6 |
| Tareyton | F;SP 85mm | 1.0070 | 25.4—28.4mm | 14.5 ± 0.3 | 1.01 ± 0.02 | 15.9 ± 0.3 |
| Tareyton Lights | F;SP 85mm | 0.8831 | 33.7—36.7mm | 4.6 ± 0.2 | 0.40 ± 0.03 | 4.7 ± 0.2 |
| Tareyton Ultra Low Tar | F;SP;M 85mm | 0.9040 | 33.5—36.7mm | 0.8 ± 0.2 | 0.09 ± 0.01 | 0.7 ± 0.2 |
| Tareyton 100's | F;SP 100mm | 1.1540 | 33.0—36.4mm | 14.6 ± 0.3 | 1.09 ± 0.03 | 16.8 ± 0.4 |

① TPM dry (tar)—milligrams total particulate matter less nicotine and water.

② Milligrams total alkaloids reported as nicotine.

③ R—regular; F—filter; NF—non-filter; M—menthol; HP—hard pack; SP—soft pack; mm—millimeter.

④ Average weight reported in grams.

⑤ Range used in butt length because of variance of overwrap.

⑥ Tolerance shown is twice the standard deviation.

** Below the sensitivity of the method.

PM3001060796

| BRAND | TYPE ^① | AVERAGE WEIGHT ^② | BUTT LENGTH ^③ | TPM DRY ^④ | NICOTINE ^⑤ | CARBON MONOXIDE |
|-----------------------------|-------------------|-----------------------------|--------------------------|----------------------|-----------------------|-----------------|
| Tareyton Long Lights 100's | F;SP 100mm | 1.1472 | 34.0—37.2mm | 7.4 ± 0.3 | 0.65 ± 0.02 | 7.4 ± 0.4 |
| Triumph | F;SP 85mm | 0.8197 | 34.0—35.5mm | 2.4 ± 0.2 | 0.32 ± 0.02 | 2.5 ± 0.2 |
| Triumph | F;SP;M 85mm | 0.8075 | 33.7—36.3mm | 2.7 ± 0.2 | 0.36 ± 0.04 | 2.9 ± 0.3 |
| Triumph 100's | F;SP 100mm | 0.9702 | 37.1—39.1mm | 4.4 ± 0.2 | 0.50 ± 0.02 | 5.7 ± 0.4 |
| Triumph 100's | F;SP;M 100mm | 0.9797 | 37.1—39.3mm | 4.0 ± 0.3 | 0.47 ± 0.02 | 5.3 ± 0.3 |
| True | F;SP 85mm | 0.8038 | 32.5—33.6mm | 4.6 ± 0.2 | 0.41 ± 0.01 | 4.8 ± 0.2 |
| True | F;SP;M 85mm | 0.8151 | 32.3—33.8mm | 4.7 ± 0.4 | 0.43 ± 0.02 | 5.2 ± 0.3 |
| True 100's | F;SP 100mm | 0.9806 | 34.0—35.7mm | 7.3 ± 0.4 | 0.61 ± 0.02 | 8.5 ± 0.3 |
| True 100's | F;SP;M 100mm | 0.9878 | 34.1—36.9mm | 7.4 ± 0.3 | 0.63 ± 0.02 | 8.6 ± 0.3 |
| Vantage | F;SP 85mm | 1.0439 | 32.5—34.0mm | 9.0 ± 0.2 | 0.70 ± 0.02 | 12.9 ± 0.2 |
| Vantage | F;SP;M 85mm | 1.0898 | 32.5—34.6mm | 8.8 ± 0.2 | 0.63 ± 0.02 | 13.0 ± 0.2 |
| Vantage Ultra Lights | F;SP 85mm | 0.9304 | 31.9—33.3mm | 4.2 ± 0.2 | 0.40 ± 0.02 | 4.9 ± 0.3 |
| Vantage 100's | F;SP 100mm | 1.2344 | 33.8—35.2mm | 8.7 ± 0.3 | 0.66 ± 0.02 | 12.2 ± 0.5 |
| Vantage Ultra Lights 100's | F;SP 100mm | 1.1125 | 35.6—37.8mm | 4.4 ± 0.3 | 0.45 ± 0.02 | 5.5 ± 0.4 |
| Viceroy | F;SP 85mm | 0.9530 | 27.5—29.6mm | 15.0 ± 0.3 | 0.91 ± 0.03 | 17.1 ± 0.4 |
| Viceroy Rich Lights | F;SP 85mm | 0.9693 | 31.4—34.4mm | 8.6 ± 0.3 | 0.69 ± 0.03 | 10.5 ± 0.4 |
| Viceroy Super Long 100's | F;SP 100mm | 1.1045 | 33.4—35.5mm | 15.2 ± 0.3 | 1.01 ± 0.03 | 17.7 ± 0.5 |
| Viceroy Rich Lights 100's | F;SP 100mm | 1.1620 | 37.5—40.9mm | 9.7 ± 0.3 | 0.77 ± 0.02 | 12.5 ± 0.4 |
| Virginia Slims 100's | F;SP 100mm | 0.9434 | 34.4—36.6mm | 15.1 ± 0.3 | 1.02 ± 0.02 | 14.3 ± 0.3 |
| Virginia Slims 100's | F;SP;M 100mm | 0.9496 | 34.3—36.2mm | 15.2 ± 0.3 | 1.02 ± 0.02 | 13.9 ± 0.4 |
| Virginia Slims Lights 100's | F;HP 100mm | 0.9624 | 38.3—40.2mm | 8.6 ± 0.3 | 0.65 ± 0.02 | 8.9 ± 0.3 |
| Virginia Slims Lights 100's | F;HP;M 100mm | 0.9642 | 38.0—40.5mm | 7.9 ± 0.3 | 0.61 ± 0.02 | 7.9 ± 0.4 |
| Winston | F;HP 80mm | 0.9577 | 25.1—26.9mm | 16.4 ± 0.3 | 1.02 ± 0.03 | 15.8 ± 0.3 |
| Winston | F;HP 85mm | 0.9540 | 27.0—28.1mm | 15.1 ± 0.3 | 1.01 ± 0.03 | 16.3 ± 0.3 |
| Winston Lights | F;SP 85mm | 0.9594 | 31.1—34.6mm | 10.7 ± 0.3 | 0.79 ± 0.02 | 11.2 ± 0.4 |
| Winston Ultra | F;SP 85mm | 0.8124 | 33.2—35.6mm | 3.7 ± 0.2 | 0.38 ± 0.02 | 4.4 ± 0.2 |
| Winston 100's | F;SP 100mm | 1.1175 | 33.5—35.2mm | 14.3 ± 0.4 | 0.87 ± 0.02 | 14.5 ± 0.4 |
| Winston Lights 100's | F;SP 100mm | 1.1184 | 36.2—38.3mm | 12.0 ± 0.4 | 0.82 ± 0.02 | 14.9 ± 0.6 |
| Winston Ultra 100's | F;SP 100mm | 1.0580 | 37.0—38.2mm | 4.8 ± 0.2 | 0.43 ± 0.01 | 6.4 ± 0.3 |
| Winston International 100's | F;HP 100mm | 1.0749 | 31.8—34.6mm | 18.2 ± 0.3 | 1.32 ± 0.03 | 17.1 ± 0.3 |

① TPM dry (tar)—milligrams total particulate matter less nicotine and water.

② Milligrams total alkaloids reported as nicotine.

③ R—regular; F—filter; NF—non-filter; M—menthol; HP—hard pack; SP—soft pack; mm—millimeter.

④ Average weight reported in grams.

⑤ Range used in butt length because of variance of overlap.

⑥ Tolerance shown is twice the standard deviation.

** Below the sensitivity of the method.

PM3001060797

| BRAND | TYPE | TAR ^① (mg/cig) | NICOTINE ^② (mg/cig) | CARBON MONOXIDE ^③ (mg/cig) |
|------------------------------|---|------------------------------|-----------------------------------|---|
| Merit | king size, filter, menthol | 8 | 0.6 | 10 |
| Golden Lights | king size, filter | 8 | 0.7 | 9 |
| Virginia Slims Lights 100's | 100 mm, filter, menthol, (hard pack) | 8 | 0.6 | 8 |
| Camel Lights | king size, filter | 8 | 0.7 | 10 |
| Decade 100's | 100 mm, filter | 8 | 0.7 | 6 |
| L & M Lights 100's | 100 mm, filter | 8 | 0.8 | 6 |
| Merit | king size, filter | 8 | 0.6 | 11 |
| Northwind | king size, filter, menthol | 8 | 0.6 | 10 |
| Golden Lights 100's | 100 mm, filter, menthol | 8 | 0.7 | 8 |
| Salem Lights | king size, filter, menthol | 8 | 0.6 | 11 |
| L & M Lights | king size, filter | 9 | 0.8 | 7 |
| Viceroy Rich Lights | king size, filter | 9 | 0.7 | 10 |
| Raleigh Lights | king size, filter | 9 | 0.7 | 10 |
| Virginia Slims Lights 100's | 100 mm, filter, (hard pack) | 9 | 0.7 | 9 |
| More Lights 100's | 100 mm, filter, (hard pack) | 9 | 0.7 | 9 |
| Parliament Lights | king size, filter, (hard pack) | 9 | 0.6 | 9 |
| Golden Lights | king size, filter, menthol | 9 | 0.8 | 9 |
| Lucky Ten | king size, filter | 9 | 0.7 | 11 |
| Vantage 100's | 100 mm, filter | 9 | 0.7 | 12 |
| Golden Lights 100's | 100 mm, filter | 9 | 0.8 | 9 |
| Vantage | king size, filter, menthol | 9 | 0.6 | 13 |
| Newport Lights | king size, filter, menthol | 9 | 0.7 | 10 |
| Northwind 100's | 100 mm, filter, menthol | 9 | 0.6 | 11 |
| Pall Mall Light 100's | 100 mm, filter | 9 | 0.8 | 8 |
| Kool Lights | king size, filter, menthol | 9 | 0.7 | 10 |
| Newport Lights | king size, filter, menthol, (hard pack) | 9 | 0.7 | 9 |
| Vantage | king size, filter | 9 | 0.7 | 13 |
| Belair | king size, filter, menthol | 9 | 0.7 | 10 |
| Newport Lights 100's | 100 mm, filter, menthol | 9 | 0.8 | 10 |
| Kool Super Lights 100's | 100 mm, filter, menthol | 9 | 0.7 | 12 |
| Merit 100's | 100 mm, filter, menthol | 9 | 0.7 | 11 |
| Belair 100's | 100 mm, filter, menthol | 9 | 0.7 | 11 |
| Parliament Lights | king size, filter | 9 | 0.7 | 11 |
| Salem Lights 100's | 100 mm, filter, menthol | 10 | 0.7 | 12 |
| Old Gold Lights | king size, filter | 10 | 0.9 | 10 |
| Viceroy Rich Lights 100's | 100 mm, filter | 10 | 0.8 | 12 |
| Raleigh Lights 100's | 100 mm, filter | 10 | 0.8 | 13 |
| Marlboro Lights | king size, filter, (hard pack) | 10 | 0.7 | 12 |
| Benson & Hedges Lights 100's | 100 mm, filter, menthol | 11 | 0.8 | 12 |
| Winston Lights | king size, filter | 11 | 0.8 | 11 |
| Merit 100's | 100 mm, filter | 11 | 0.7 | 13 |
| Benson & Hedges Lights 100's | 100 mm, filter | 11 | 0.8 | 13 |
| Benson & Hedges Lights 100's | 100 mm, filter, menthol, (hard pack) | 11 | 0.8 | 12 |
| Marlboro Lights 100's | 100 mm, filter | 11 | 0.8 | 13 |
| Marlboro Lights | king size, filter | 11 | 0.8 | 13 |
| Kool Lights 100's | 100 mm, filter, menthol | 11 | 0.9 | 11 |
| Multifilter | king size, filter, menthol | 11 | 0.8 | 10 |
| Kool Milds | king size, filter, menthol | 11 | 0.8 | 13 |
| Benson & Hedges Lights 100's | 100 mm, filter, (hard pack) | 11 | 0.8 | 13 |
| Parliament Lights 100's | 100 mm, filter | 12 | 0.9 | 11 |
| Winston Lights 100's | 100 mm, filter | 12 | 0.8 | 15 |
| Kool Milds 100's | 100 mm, filter, menthol | 12 | 0.9 | 14 |
| Camel Lights 100's | 100 mm, filter | 12 | 0.8 | 15 |
| Multifilter | king size, filter | 12 | 0.8 | 12 |
| Kent | king size, filter | 12 | 0.9 | 12 |
| Silva Thins 100's | 100 mm, filter | 12 | 1.1 | 10 |
| Silva Thins 100's | 100 mm, filter, menthol | 12 | 1.1 | 10 |
| Eve Lights 100's | 100 mm, filter, menthol | 13 | 1.0 | 13 |
| Eve Lights 100's | 100 mm, filter | 13 | 1.0 | 13 |
| Kent | king size, filter, (hard pack) | 13 | 0.9 | 13 |
| Pall Mall Light 100's | 100 mm, filter, menthol | 13 | 1.1 | 13 |
| Newport Red | king size, filter, (hard pack) | 13 | 1.1 | 14 |
| Newport Red | king size, filter | 13 | 1.0 | 15 |
| Eve Lights 120's | 120 mm, filter, (hard pack) | 13 | 1.1 | 11 |
| Eve Lights 120's | 120 mm, filter, menthol, (hard pack) | 14 | 1.1 | 11 |
| Lark Lights | king size, filter | 14 | 1.0 | 13 |

① All results below 0.5 mg. "tar," 0.05 mg. nicotine and 0.5 mg. carbon monoxide reported as <0.5, <0.05, and <0.5, respectively.

PM3001060798

NICOTINE AND CARBON MONOXIDE^③ CONTENT
OF TWO HUNDRED-EIGHT (208) VARIETIES OF DOMESTIC CIGARETTES
(shown in increasing order of "tar" values)

| BRAND | TYPE | TAR ^① (mg/cig) | NICOTINE ^② (mg/cig) | CARBON MONOXIDE ^③ (mg/cig) |
|----------------------------|--------------------------------------|------------------------------|-----------------------------------|---|
| Now | king size, filter, (hard pack) | <0.5 | 0.1 | <0.5 |
| Carlton | king size, filter, (hard pack) | <0.5 | 0.1 | <0.5 |
| Now 100's | 100 mm, filter, (hard pack) | <0.5 | <0.05 | <0.5 |
| Cambridge | king size, filter, (hard pack) | <0.5 | <0.05 | 1 |
| Carlton 100's | 100 mm, filter, menthol, (hard pack) | <0.5 | 0.1 | <0.5 |
| Carlton | king size, filter, menthol | <0.5 | 0.1 | 1 |
| Carlton 100's | 100 mm, filter, (hard pack) | 1 | 0.1 | 1 |
| Barclay* | king size, filter | 1 | 0.1 | 1 |
| Cambridge | king size, filter | 1 | 0.1 | 1 |
| Tareyton Ultra Low Tar | king size, filter, menthol | 1 | 0.1 | 1 |
| Now | king size, filter, menthol | 1 | 0.1 | 1 |
| Benson & Hedges | reg. size, filter, (hard pack) | 1 | 0.1 | 2 |
| Carlton | king size, filter | 1 | 0.1 | 2 |
| Now | king size, filter | 1 | 0.1 | 1 |
| Barclay* | king size, filter, menthol | 1 | 0.1 | 1 |
| Barclay* | king size, filter, (hard pack) | 1 | 0.2 | 1 |
| Kool Ultra*** | king size, filter, menthol | 2 | 0.2 | 1 |
| Now 100's | 100 mm, filter, menthol | 2 | 0.2 | 1 |
| Now 100's | 100 mm, filter | 2 | 0.2 | 2 |
| Triumph | king size, filter | 2 | 0.3 | 2 |
| Kent III | king size, filter | 2 | 0.3 | 2 |
| Iceberg 100's | 100 mm, filter, menthol | 3 | 0.3 | 4 |
| Triumph | king size, filter, menthol | 3 | 0.4 | 3 |
| Barclay 100's* | 100 mm, filter | 3 | 0.3 | 2 |
| Lucky 100's | 100 mm, filter | 3 | 0.3 | 4 |
| Cambridge 100's | 100 mm, filter | 3 | 0.3 | 5 |
| Barclay 100's* | 100 mm, filter, menthol | 3 | 0.3 | 3 |
| Merit Ultra Lights | king size, filter, menthol | 3 | 0.3 | 4 |
| Merit Ultra Lights | king size, filter | 4 | 0.3 | 4 |
| Winston Ultra | king size, filter | 4 | 0.4 | 4 |
| Triumph 100's | 100 mm, filter, menthol | 4 | 0.5 | 5 |
| Carlton 100's | 100 mm, filter, menthol | 4 | 0.4 | 5 |
| Doral II | king size, filter, menthol | 4 | 0.4 | 3 |
| Carlton 100's | 100 mm, filter | 4 | 0.4 | 6 |
| Vantage Ultra Lights | king size, filter | 4 | 0.4 | 5 |
| Kool Ultra 100's*** | 100 mm, filter, menthol | 4 | 0.4 | 4 |
| Doral II | king size, filter | 4 | 0.4 | 4 |
| Vantage Ultra Lights 100's | 100 mm, filter | 4 | 0.4 | 5 |
| Triumph 100's | 100 mm, filter | 4 | 0.5 | 6 |
| Salem Ultra | king size, filter, menthol | 5 | 0.4 | 5 |
| Tareyton Lights | king size, filter | 5 | 0.4 | 5 |
| True | king size, filter | 5 | 0.4 | 5 |
| Salem Ultra 100's | 100 mm, filter, menthol | 5 | 0.4 | 6 |
| Kent III 100's | 100 mm, filter | 5 | 0.5 | 6 |
| True | king size, filter, menthol | 5 | 0.4 | 5 |
| Winston Ultra 100's | 100 mm, filter | 5 | 0.4 | 6 |
| Decade | king size, filter, menthol | 5 | 0.4 | 4 |
| Decade | king size, filter | 5 | 0.5 | 5 |
| Carlton 120's | 120 mm, filter | 6 | 0.6 | 4 |
| Carlton 120's | 120 mm, filter, menthol | 6 | 0.6 | 5 |
| Kool Super Lights | king size, filter, menthol | 6 | 0.5 | 6 |
| Pall Mall Extra Light | king size, filter | 6 | 0.6 | 7 |
| True 100's | 100 mm, filter | 7 | 0.6 | 8 |
| Tareyton Long Lights 100's | 100 mm, filter | 7 | 0.6 | 7 |
| True 100's | 100 mm, filter, menthol | 7 | 0.6 | 9 |
| More Lights 100's | 100 mm, filter, menthol, (hard pack) | 8 | 0.6 | 9 |
| Omni 100's | 100 mm, filter, menthol | 8 | 0.7 | 6 |
| Camel Lights | king size, filter, (hard pack) | 8 | 0.7 | 8 |
| L & M Lights 100's | 100 mm, filter, menthol | 8 | 0.8 | 6 |

① TPM dry (tar)—milligrams total particulate matter less nicotine and water.

② Milligrams total alkaloids reported as nicotine.

③ All results below 0.5 mg. "tar," 0.05 mg. nicotine and 0.5 mg. carbon monoxide reported as <0.5, <0.05, and <0.5, respectively.

* See statement in text concerning Barclay.

*** See statement in text concerning Kool Ultra.

PM3001060799

| BRAND | TYPE | TAR Φ (mg/cig) | NICOTINE Φ (mg/cig) | CARBON MONOXIDE Φ (mg/cig) |
|-----------------------------------|---|------------------------|-----------------------------|---------------------------------------|
| Alpine | king size, filter, menthol | 14 | 0.9 | 14 |
| Kent 100's | 100 mm, filter | 14 | 1.1 | 13 |
| Kool Super Long 100's | 100 mm, filter, menthol | 14 | 1.0 | 16 |
| Winston 100's | 100 mm, filter | 14 | 1.0 | 14 |
| L & M | king size, filter, (hard pack) | 14 | 1.0 | 15 |
| Tareyton | king size, filter | 14 | 1.0 | 16 |
| St. Moritz 100's | 100 mm, filter | 15 | 1.1 | 15 |
| Tareyton 100's | 100 mm, filter | 15 | 1.1 | 17 |
| Marlboro | king size, filter, menthol | 15 | 0.9 | 14 |
| Salem | king size, filter, menthol | 15 | 1.0 | 14 |
| St. Moritz 100's | 100 mm, filter, menthol | 15 | 1.1 | 15 |
| Lark Lights 100's | 100 mm, filter | 15 | 1.1 | 14 |
| Kent 100's | 100 mm, filter, menthol | 15 | 1.2 | 14 |
| Salem 100's | 100 mm, filter, menthol | 15 | 1.1 | 14 |
| L & M | king size, filter | 15 | 1.0 | 15 |
| Viceroy | king size, filter | 15 | 0.9 | 17 |
| Chesterfield | king size, filter | 15 | 1.0 | 15 |
| Saratoga 120's | 120 mm, filter, (hard pack) | 15 | 1.0 | 16 |
| Virginia Slims 100's | 100 mm, filter | 15 | 1.0 | 14 |
| Marlboro | king size, filter, menthol, (hard pack) | 15 | 0.9 | 14 |
| Winston | king size, filter | 15 | 1.0 | 16 |
| Oasis | king size, filter, menthol | 15 | 1.0 | 15 |
| Chesterfield 100's | 100 mm, filter | 15 | 1.1 | 17 |
| Viceroy Super Long 100's | 100 mm, filter | 15 | 1.0 | 18 |
| L & M 100's | 100 mm, filter | 15 | 1.1 | 16 |
| Montclair | king size, filter, menthol | 15 | 1.0 | 16 |
| Virginia Slims 100's | 100 mm, filter, menthol | 15 | 1.0 | 14 |
| Lark | king size, filter | 15 | 1.1 | 14 |
| Long Johns 120's | 120 mm, filter, menthol | 15 | 1.3 | 16 |
| Camel | king size, filter | 15 | 1.0 | 15 |
| Saratoga 120's | 120 mm, filter, menthol, (hard pack) | 15 | 1.0 | 16 |
| Newport | king size, filter, menthol, (hard pack) | 16 | 1.1 | 16 |
| Philip Morris International 100's | 100 mm, filter, menthol, (hard pack) | 16 | 1.0 | 16 |
| More 120's | 120 mm, filter, menthol | 16 | 1.2 | 19 |
| Galaxy | king size, filter | 16 | 1.0 | 16 |
| Raleigh | king size, filter | 16 | 1.0 | 17 |
| DuMaurier | king size, filter, (hard pack) | 16 | 1.0 | 18 |
| Benson & Hedges 100's | 100 mm, filter, (hard pack) | 16 | 1.1 | 15 |
| Benson & Hedges | king size, filter, (hard pack) | 16 | 1.2 | 13 |
| Lark 100's | 100 mm, filter | 16 | 1.2 | 15 |
| Kool | king size, filter, menthol, (hard pack) | 16 | 1.1 | 17 |
| Benson & Hedges 100's | 100 mm, filter, menthol, (hard pack) | 16 | 1.1 | 15 |
| Pall Mall 100's | 100 mm, filter | 16 | 1.2 | 16 |
| Winston | king size, filter, (hard pack) | 16 | 1.0 | 16 |
| Marlboro | king size, filter, (hard pack) | 16 | 1.1 | 15 |
| Benson & Hedges 100's | 100 mm, filter, menthol | 17 | 1.1 | 16 |
| Kool | king size, filter, menthol | 17 | 1.1 | 15 |
| Tall 120's | 120 mm, filter, menthol | 17 | 1.3 | 18 |
| Raleigh 100's | 100 mm, filter | 17 | 1.0 | 18 |
| Newport | king size, filter, menthol | 17 | 1.2 | 17 |
| Benson & Hedges 100's | 100 mm, filter | 17 | 1.1 | 16 |
| Marlboro 100's | 100 mm, filter | 17 | 1.1 | 16 |
| Marlboro | king size, filter | 17 | 1.1 | 15 |
| Marlboro 100's | 100 mm, filter, (hard pack) | 17 | 1.1 | 17 |
| Old Gold Filter | king size, filter | 17 | 1.3 | 18 |
| More 120's | 120 mm, filter | 17 | 1.2 | 21 |
| Philip Morris International 100's | 100 mm, filter, (hard pack) | 18 | 1.1 | 16 |
| Half & Half | king size, filter | 18 | 1.4 | 16 |
| Pall Mall | king size, filter | 18 | 1.2 | 18 |
| Picayune | reg. size, non-filter | 18 | 1.2 | 14 |
| Winston International 100's | 100 mm, filter, (hard pack) | 18 | 1.3 | 17 |
| Max 120's | 120 mm, filter, menthol | 18 | 1.5 | 17 |
| Kool | reg. size, non-filter, menthol | 18 | 1.0 | 14 |
| Tall 120's | 120 mm, filter | 19 | 1.5 | 19 |
| Max 120's | 120 mm, filter | 19 | 1.5 | 18 |
| Long Johns 120's | 120 mm, filter | 19 | 1.5 | 19 |

Φ All results below 0.5 mg. "tar," 0.05 mg. nicotine and 0.5 mg. carbon monoxide reported as <0.5, <0.05, and <0.5, respectively.

PM3001060800

| BRAND | TYPE | CARBON | | |
|-------------------------|------------------------------------|------------------------------|-----------------------------------|-----------------------------------|
| | | TAR ^① (mg/cig) | NICOTINE ^① (mg/cig) | MONOXIDE ^② (mg/cig) |
| Old Gold Filters | 100 mm, filter | 20 | 1.5 | 19 |
| Spring 100's | 100 mm, filter, menthol | 20 | 1.1 | 18 |
| Newport 100's | 100 mm, filter, menthol | 20 | 1.4 | 20 |
| Came | reg. size, non-filter | 20 | 1.3 | 12 |
| Chesterfield | reg. size, non-filter | 20 | 1.3 | 13 |
| Philip Morris | reg. size, non-filter | 22 | 1.4 | 12 |
| Raleigh | king size, non-filter | 23 | 1.3 | 17 |
| English Ovals | reg. size, non-filter, (hard pack) | 23 | 1.7 | 12 |
| Lucky Strike | reg. size, non-filter | 24 | 1.5 | 16 |
| Chesterfield | king size, non-filter | 24 | 1.6 | 14 |
| Pall Mall | king size, non-filter | 24 | 1.6 | 16 |
| Players | reg. size, non-filter, (hard pack) | 25 | 1.8 | 14 |
| Old Gold Straight | king size, non-filter | 26 | 1.6 | 17 |
| Philip Morris Commander | king size, non-filter | 26 | 1.7 | 15 |
| English Ovals | king size, non-filter, (hard pack) | 27 | 2.0 | 13 |
| Herbert Tareyton | king size, non-filter | 28 | 1.8 | 19 |
| Bull Durham | king size, filter | 30 | 2.0 | 23 |

① All results below 0.5 mg. "tar", 0.05 mg. nicotine and 0.5 mg. carbon monoxide reported as <0.5, <0.05, and <0.5, respectively.

PM3001060801

TAR^①, NICOTINE^② AND CARBON MONOXIDE^③ CONTENT
OF TWO HUNDRED-EIGHT (208) VARIETIES OF DOMESTIC CIGARETTES
(shown in increasing order of nicotine values)

| BRAND | TYPE | TAR ^① (mg/cig) | NICOTINE ^② (mg/cig) | CARBON MONOXIDE ^③ (mg/cig) |
|-----------------------------|--------------------------------------|------------------------------|-----------------------------------|---|
| Now 100's | 100 mm, filter, (hard pack) | <0.5 | <0.05 | <0.5 |
| Now | king size, filter, (hard pack) | <0.5 | <0.05 | <0.5 |
| Cambridge | king size, filter, (hard pack) | <0.5 | <0.05 | <0.5 |
| Carlton 100's | 100 mm, filter, menthol, (hard pack) | <0.5 | 0.1 | <0.5 |
| Carlton | king size, filter, (hard pack) | <0.5 | 0.1 | <0.5 |
| Carlton | king size, filter, menthol | <0.5 | 0.1 | 1 |
| Tareyton Ultra Low Tar | king size, filter, menthol | 1 | 0.1 | 1 |
| Carlton 100's | 100 mm, filter, (hard pack) | 1 | 0.1 | 1 |
| Cambridge | king size, filter | 1 | 0.1 | 1 |
| Benson & Hedges | reg. size, filter, (hard pack) | 1 | 0.1 | 2 |
| Now | king size, filter, menthol | 1 | 0.1 | 1 |
| Barclay* | king size, filter, menthol | 1 | 0.1 | 1 |
| Barclay* | king size, filter | 1 | 0.1 | 1 |
| Carlton | king size, filter | 1 | 0.1 | 2 |
| Now | king size, filter | 1 | 0.1 | 1 |
| Kool Ultra*** | king size, filter, menthol | 2 | 0.2 | 1 |
| Barclay* | king size, filter, (hard pack) | 1 | 0.2 | 1 |
| Now 100's | 100 mm, filter, menthol | 2 | 0.2 | 1 |
| Now 100's | 100 mm, filter | 2 | 0.2 | 2 |
| Iceberg 100's | 100 mm, filter, menthol | 3 | 0.3 | 4 |
| Merit Ultra Lights | king size, filter, menthol | 3 | 0.3 | 4 |
| Kent III | king size, filter | 2 | 0.3 | 2 |
| Barclay 100's* | 100 mm, filter, menthol | 3 | 0.3 | 3 |
| Barclay 100's* | 100 mm, filter | 3 | 0.3 | 2 |
| Lucky 100's | 100 mm, filter | 3 | 0.3 | 4 |
| Triumph | king size, filter | 2 | 0.3 | 2 |
| Merit Ultra Lights | king size, filter | 4 | 0.3 | 4 |
| Cambridge 100's | 100 mm, filter | 3 | 0.3 | 5 |
| Triumph | king size, filter, menthol | 3 | 0.4 | 3 |
| Winston Ultra | king size, filter | 4 | 0.4 | 4 |
| Doral II | king size, filter, menthol | 4 | 0.4 | 3 |
| Carlton 100's | 100 mm, filter, menthol | 4 | 0.4 | 5 |
| Kool Ultra 100's*** | 100 mm, filter, menthol | 4 | 0.4 | 4 |
| Tareyton Lights | king size, filter | 5 | 0.4 | 5 |
| Doral II | king size, filter | 4 | 0.4 | 4 |
| Vantage Ultra Lights | king size, filter | 4 | 0.4 | 5 |
| Carlton 100's | 100 mm, filter | 4 | 0.4 | 6 |
| True | king size, filter | 5 | 0.4 | 5 |
| Salem Ultra | king size, filter, menthol | 5 | 0.4 | 5 |
| Salem Ultra 100's | 100 mm, filter, menthol | 5 | 0.4 | 6 |
| True | king size, filter, menthol | 5 | 0.4 | 5 |
| Winston Ultra 100's | 100 mm, filter | 5 | 0.4 | 6 |
| Decade | king size, filter, menthol | 5 | 0.4 | 4 |
| Vantage Ultra Lights 100's | 100 mm, filter | 4 | 0.4 | 5 |
| Triumph 100's | 100 mm, filter, menthol | 4 | 0.5 | 5 |
| Decade | king size, filter | 5 | 0.5 | 5 |
| Kent III 100's | 100 mm, filter | 5 | 0.5 | 6 |
| Triumph 100's | 100 mm, filter | 4 | 0.5 | 6 |
| Kool Super Lights | king size, filter, menthol | 6 | 0.5 | 6 |
| Carlton 120's | 120 mm, filter | 6 | 0.6 | 4 |
| Northwind | king size, filter, menthol | 8 | 0.6 | 10 |
| Carlton 120's | 120 mm, filter, menthol | 6 | 0.6 | 5 |
| Merit | king size, filter, menthol | 8 | 0.6 | 10 |
| Merit | king size, filter | 8 | 0.6 | 11 |
| Pall Mall Extra Light | king size, filter | 6 | 0.6 | 7 |
| Virginia Slims Lights 100's | 100 mm, filter, menthol, (hard pack) | 8 | 0.6 | 8 |

① TPM dry (tar)—milligrams total particulate matter less nicotine and water.

② Milligrams total alkaloids reported as nicotine.

③ All results below 0.5 mg. "tar," 0.05 mg. nicotine and 0.5 mg. carbon monoxide reported as <0.5, <0.05, and <0.5, respectively.

* See statement in text concerning Barclay.

*** See statement in text concerning Kool Ultra.

PM3001060802

| BRAND | TYPE | TAR [Ⓢ] (mg/clg) | NICOTINE [Ⓢ] (mg/clg) | MONOXIDE [Ⓢ] (mg/clg) |
|------------------------------|---|------------------------------|-----------------------------------|-----------------------------------|
| True 100's | 100 mm, filter | 7 | 0.6 | 8 |
| Northwind 100's | 100 mm, filter, menthol | 9 | 0.6 | 11 |
| More Lights 100's | 100 mm, filter, menthol, (hard pack) | 8 | 0.6 | 9 |
| True 100's | 100 mm, filter, menthol | 7 | 0.6 | 8 |
| Vantage | king size, filter, menthol | 9 | 0.6 | 13 |
| Parliament Lights | king size, filter, (hard pack) | 9 | 0.6 | 9 |
| Salem Lights | king size, filter, menthol | 8 | 0.6 | 11 |
| Tareyton Long Lights 100's | 100 mm, filter | 7 | 0.6 | 7 |
| Virginia Slims Lights 100's | 100 mm, filter, (hard pack) | 9 | 0.7 | 9 |
| Vantage 100's | 100 mm, filter | 9 | 0.7 | 12 |
| Kool Super Lights 100's | 100 mm, filter, menthol | 9 | 0.7 | 12 |
| Kool Lights | king size, filter, menthol | 9 | 0.7 | 10 |
| Camel Lights | king size, filter | 8 | 0.7 | 10 |
| Camel Lights | king size, filter, (hard pack) | 8 | 0.7 | 8 |
| Merit 100's | 100 mm, filter, menthol | 9 | 0.7 | 11 |
| More Lights 100's | 100 mm, filter, (hard pack) | 9 | 0.7 | 9 |
| Parliament Lights | king size, filter | 9 | 0.7 | 11 |
| Raleigh Lights | king size, filter | 9 | 0.7 | 10 |
| Viceroy Rich Lights | king size, filter | 9 | 0.7 | 10 |
| Belair 100's | 100 mm, filter, menthol | 9 | 0.7 | 11 |
| Lucky Ten | king size, filter | 9 | 0.7 | 11 |
| Vantage | king size, filter | 9 | 0.7 | 13 |
| Golden Lights | king size, filter | 8 | 0.7 | 9 |
| Omni 100's | 100 mm, filter, menthol | 8 | 0.7 | 6 |
| Marlboro Lights | king size, filter, (hard pack) | 10 | 0.7 | 12 |
| Belair | king size, filter, menthol | 9 | 0.7 | 10 |
| Newport Lights | king size, filter, menthol | 9 | 0.7 | 10 |
| Merit 100's | 100 mm, filter | 11 | 0.7 | 13 |
| Newport Lights | king size, filter, menthol, (hard pack) | 9 | 0.7 | 9 |
| Salem Lights 100's | 100 mm, filter, menthol | 10 | 0.7 | 12 |
| Decade 100's | 100 mm, filter | 8 | 0.7 | 6 |
| Golden Lights 100's | 100 mm, filter, menthol | 8 | 0.7 | 8 |
| L & M Lights 100's | 100 mm, filter, menthol | 8 | 0.8 | 6 |
| Golden Lights | king size, filter, menthol | 9 | 0.8 | 9 |
| Benson & Hedges Lights 100's | 100 mm, filter, menthol | 11 | 0.8 | 12 |
| Viceroy Rich Lights 100's | 100 mm, filter | 10 | 0.8 | 12 |
| Multifilter | king size, filter, menthol | 11 | 0.8 | 10 |
| Marlboro Lights | king size, filter | 11 | 0.8 | 13 |
| Raleigh Lights 100's | 100 mm, filter | 10 | 0.8 | 13 |
| Pall Mall Light 100's | 100 mm, filter | 9 | 0.8 | 8 |
| Golden Lights 100's | 100 mm, filter | 9 | 0.8 | 9 |
| L & M Lights | king size, filter | 9 | 0.8 | 7 |
| Benson & Hedges Lights 100's | 100 mm, filter | 11 | 0.8 | 13 |
| Winston Lights | king size, filter | 11 | 0.8 | 11 |
| Benson & Hedges Lights 100's | 100 mm, filter, (hard pack) | 11 | 0.8 | 13 |
| Benson & Hedges Lights 100's | 100 mm, filter, menthol, (hard pack) | 11 | 0.8 | 12 |
| Newport Lights 100's | 100 mm, filter, menthol | 9 | 0.8 | 10 |
| L & M Lights 100's | 100 mm, filter | 8 | 0.8 | 6 |
| Kool Milds | king size, filter, menthol | 11 | 0.8 | 13 |
| Marlboro Lights 100's | 100 mm, filter | 11 | 0.8 | 13 |
| Multifilter | king size, filter | 12 | 0.8 | 12 |
| Winston Lights 100's | 100 mm, filter | 12 | 0.8 | 15 |
| Camel Lights 100's | 100 mm, filter | 12 | 0.8 | 15 |
| Old Gold Lights | king size, filter | 10 | 0.9 | 10 |
| Kool Lights 100's | 100 mm, filter, menthol | 11 | 0.9 | 11 |
| Alpine | king size, filter, menthol | 14 | 0.9 | 14 |
| Kool Milds 100's | 100 mm, filter, menthol | 12 | 0.9 | 14 |
| Marlboro | king size, filter, menthol | 15 | 0.9 | 14 |
| Parliament Lights 100's | 100 mm, filter | 12 | 0.9 | 11 |
| Marlboro | king size, filter, menthol, (hard pack) | 15 | 0.9 | 14 |
| Viceroy | king size, filter | 15 | 0.9 | 17 |
| Kent | king size, filter, (hard pack) | 13 | 0.9 | 13 |
| Kent | king size, filter | 12 | 0.9 | 12 |
| L & M | king size, filter, (hard pack) | 14 | 1.0 | 15 |
| Kool Super Long 100's | 100 mm, filter, menthol | 14 | 1.0 | 16 |
| Raleigh | king size, filter | 16 | 1.0 | 17 |

Ⓢ All results below 0.5 mg. "tar," 0.05 mg. nicotine and 0.5 mg. carbon monoxide reported as <0.5, <0.05, and <0.5, respectively.

PM3001060803

| BRAND | TYPE | TAR ₉ (mg/cig) | NICOTINE ₉ (mg/cig) | CARBON MONOXIDE ₉ (mg/cig) |
|-----------------------------------|---|------------------------------|-----------------------------------|---|
| Eve Lights 100's | 100 mm, filter | 13 | 1.0 | 13 |
| Eve Lights 100's | 100 mm, filter, menthol | 13 | 1.0 | 13 |
| Winston 100's | 100 mm, filter | 14 | 1.0 | 14 |
| Philip Morris International 100's | 100 mm, filter, menthol, (hard pack) | 16 | 1.0 | 16 |
| Oasis | king size, filter, menthol | 15 | 1.0 | 15 |
| Montclair | king size, filter, menthol | 15 | 1.0 | 16 |
| Galaxy | king size, filter | 16 | 1.0 | 16 |
| Tareyton | king size, filter | 14 | 1.0 | 16 |
| Winston | king size, filter | 15 | 1.0 | 16 |
| Lark Lights | king size, filter | 14 | 1.0 | 13 |
| Viceroy Super Longs 100's | 100 mm, filter | 15 | 1.0 | 18 |
| Salem | king size, filter, menthol | 15 | 1.0 | 14 |
| Virginia Slims 100's | 100 mm, filter, menthol | 15 | 1.0 | 14 |
| Virginia Slims 100's | 100 mm, filter | 15 | 1.0 | 14 |
| Winston | king size, filter, (hard pack) | 16 | 1.0 | 16 |
| DuMaurier | king size, filter, (hard pack) | 16 | 1.0 | 18 |
| L & M | king size, filter | 15 | 1.0 | 15 |
| Camel | king size, filter | 15 | 1.0 | 15 |
| Saratoga 120's | 120 mm, filter, (hard pack) | 15 | 1.0 | 16 |
| Kool | reg. size, non-filter, menthol | 18 | 1.0 | 14 |
| Saratoga 120's | 120 mm, filter, menthol, (hard pack) | 15 | 1.0 | 16 |
| Chesterfield | king size, filter | 15 | 1.0 | 15 |
| Newport Red | king size, filter | 13 | 1.0 | 15 |
| Raleigh 100's | 100 mm, filter | 17 | 1.0 | 18 |
| Benson & Hedges 100's | 100 mm, filter, menthol, (hard pack) | 16 | 1.1 | 15 |
| Pall Mall Light 100's | 100 mm, filter, menthol | 13 | 1.1 | 13 |
| Newport Red | king size, filter, (hard pack) | 13 | 1.1 | 14 |
| Benson & Hedges 100's | 100 mm, filter, (hard pack) | 16 | 1.1 | 15 |
| Marlboro | king size, filter, (hard pack) | 16 | 1.1 | 15 |
| Chesterfield 100 | 100 mm, filter | 15 | 1.1 | 17 |
| Marlboro | king size, filter | 17 | 1.1 | 15 |
| Kent 100's | 100 mm, filter | 14 | 1.1 | 13 |
| Tareyton 100's | 100 mm, filter | 15 | 1.1 | 17 |
| Silva Thins 100's | 100 mm, filter | 12 | 1.1 | 10 |
| L & M 100's | 100 mm, filter | 15 | 1.1 | 16 |
| Eve Lights 120's | 120 mm, filter, (hard pack) | 13 | 1.1 | 11 |
| Silva Thins 100's | 100 mm, filter, menthol | 12 | 1.1 | 10 |
| St. Moritz 100's | 100 mm, filter | 15 | 1.1 | 15 |
| Spring 100's | 100 mm, filter, menthol | 20 | 1.1 | 18 |
| Kool | king size, filter, menthol, (hard pack) | 16 | 1.1 | 17 |
| Newport | king size, filter, menthol, (hard pack) | 16 | 1.1 | 16 |
| Eve Lights 120's | 120 mm, filter, menthol, (hard pack) | 14 | 1.1 | 11 |
| Marlboro 100's | 100 mm, filter | 17 | 1.1 | 16 |
| Marlboro 100's | 100 mm, filter, (hard pack) | 17 | 1.1 | 17 |
| Lark Lights 100's | 100 mm, filter | 15 | 1.1 | 14 |
| Kool | king size, filter, menthol | 17 | 1.1 | 15 |
| Philip Morris International 100's | 100 mm, filter, (hard pack) | 18 | 1.1 | 16 |
| Benson & Hedges 100's | 100 mm, filter, menthol | 17 | 1.1 | 16 |
| Benson & Hedges 100's | 100 mm, filter | 17 | 1.1 | 16 |
| Lark | king size, filter | 15 | 1.1 | 14 |
| Salem 100's | 100 mm, filter, menthol | 15 | 1.1 | 14 |
| St. Moritz 100's | 100 mm, filter, menthol | 15 | 1.1 | 15 |
| Picayune | reg. size, non-filter | 18 | 1.2 | 14 |
| Pall Mall | king size, filter | 18 | 1.2 | 18 |
| Benson & Hedges | king size, filter, (hard pack) | 16 | 1.2 | 13 |
| Lark 100's | 100 mm, filter | 16 | 1.2 | 15 |
| Newport | king size, filter, menthol | 17 | 1.2 | 17 |
| Kent 100's | 100 mm, filter, menthol | 15 | 1.2 | 14 |
| More 120's | 120 mm, filter | 17 | 1.2 | 21 |
| More 120's | 120 mm, filter, menthol | 16 | 1.2 | 19 |
| Pall Mall 100's | 100 mm, filter | 16 | 1.2 | 16 |
| Old Gold Filter | king size, filter | 17 | 1.3 | 18 |
| Raleigh | king size, non-filter | 23 | 1.3 | 17 |
| Camel | reg. size, non-filter | 20 | 1.3 | 12 |
| Long Johns 120's | 120 mm, filter, menthol | 15 | 1.3 | 16 |
| Chesterfield | reg. size, non-filter | 20 | 1.3 | 13 |

© All results below 0.5 mg. "tar," 0.05 mg. nicotine and 0.5 mg. carbon monoxide reported as <0.5, <0.05, and <0.5, respectively.

PM3001060804

| BRAND | TYPE | CARBON | | |
|-----------------------------|------------------------------------|------------------------------|-----------------------------------|-----------------------------------|
| | | TAR [Ⓐ] (mg/cig) | NICOTINE [Ⓐ] (mg/cig) | MONOXIDE [Ⓐ] (mg/cig) |
| Winston International 100's | 100 mm, filter, (hard pack) | 18 | 1.3 | 17 |
| Tall 120's | 120 mm, filter, menthol | 17 | 1.3 | 18 |
| Philip Morris | reg. size, non-filter | 22 | 1.4 | 12 |
| Half & Half | king size, filter | 18 | 1.4 | 16 |
| Newport 100's | 100 mm, filter, menthol | 20 | 1.4 | 20 |
| Lucky Strike | reg. size, non-filter | 24 | 1.5 | 16 |
| Max 120's | 120 mm, filter, menthol | 18 | 1.5 | 17 |
| Old Gold Filter 100's | 100 mm, filter | 20 | 1.5 | 19 |
| Max 120's | 120 mm, filter | 19 | 1.5 | 18 |
| Tall 120's | 120 mm, filter | 19 | 1.5 | 19 |
| Long Johns 120's | 120 mm, filter | 19 | 1.5 | 19 |
| Pall Mall | king size, non-filter | 24 | 1.6 | 16 |
| Chesterfield | king size, non-filter | 24 | 1.6 | 14 |
| Old Gold Straights | king size, non-filter | 26 | 1.6 | 17 |
| English Ovals | reg. size, non-filter, (hard pack) | 23 | 1.7 | 12 |
| Philip Morris Commander | king size, non-filter | 26 | 1.7 | 15 |
| Herbert Tareyton | king size, non-filter | 28 | 1.8 | 19 |
| Players | reg. size, non-filter, (hard pack) | 25 | 1.8 | 14 |
| Bull Durham | king size, filter | 30 | 2.0 | 23 |
| English Ovals | king size, non-filter, (hard pack) | 27 | 2.0 | 13 |

[Ⓐ] All results below 0.5 mg. "tar," 0.05 mg. nicotine and 0.5 mg. carbon monoxide reported as <0.5, <0.05, and <0.5, respectively.

| BRAND | TYPE | TAR ^① (mg/clg) | NICOTINE ^② (mg/clg) | CARBON MONOXIDE ^③ (mg/clg) |
|------------------------------|---|------------------------------|-----------------------------------|---|
| Virginia Slims Lights 100's | 100 mm, filter, menthol, (hard pack) | 8 | 0.6 | 8 |
| Pall Mall Light 100's | 100 mm, filter | 9 | 0.8 | 8 |
| Golden Lights 100's | 100 mm, filter, menthol | 8 | 0.7 | 8 |
| True 100's | 100 mm, filter | 7 | 0.6 | 8 |
| Golden Lights | king size, filter | 8 | 0.7 | 9 |
| True 100's | 100 mm, filter, menthol | 7 | 0.6 | 9 |
| Virginia Slims Lights 100's | 100 mm, filter, (hard pack) | 9 | 0.7 | 9 |
| Golden Lights 100's | 100 mm, filter | 9 | 0.8 | 9 |
| More Lights 100's | 100 mm, filter, (hard pack) | 9 | 0.7 | 9 |
| More Lights 100's | 100 mm, filter, menthol, (hard pack) | 8 | 0.6 | 9 |
| Golden Lights | king size, filter, menthol | 9 | 0.8 | 9 |
| Parliament Lights | king size, filter, (hard pack) | 9 | 0.6 | 9 |
| Newport Lights | king size, filter, menthol, (hard pack) | 9 | 0.7 | 9 |
| Newport Lights 100's | 100 mm, filter, menthol | 9 | 0.8 | 10 |
| Newport Lights | king size, filter, menthol | 9 | 0.7 | 10 |
| Belair | king size, filter, menthol | 9 | 0.7 | 10 |
| Raleigh Lights | king size, filter | 9 | 0.7 | 10 |
| Merit | king size, filter, menthol | 8 | 0.6 | 10 |
| Northwind | king size, filter, menthol | 8 | 0.6 | 10 |
| Multifilter | king size, filter, menthol | 11 | 0.8 | 10 |
| Silva Thins 100's | 100 mm, filter, menthol | 12 | 1.1 | 10 |
| Old Gold Lights | king size, filter | 10 | 0.9 | 10 |
| Camel Lights | king size, filter | 8 | 0.7 | 10 |
| Silva Thins 100's | 100 mm, filter | 12 | 1.1 | 10 |
| Viceroy Rich Lights | king size, filter | 9 | 0.7 | 10 |
| Kool Lights | king size, filter, menthol | 9 | 0.7 | 10 |
| Salem Lights | king size, filter, menthol | 8 | 0.6 | 11 |
| Lucky Ten | king size, filter | 9 | 0.7 | 11 |
| Northwind 100's | 100 mm, filter, menthol | 9 | 0.6 | 11 |
| Merit | king size, filter | 8 | 0.6 | 11 |
| Parliament Lights | king size, filter | 9 | 0.7 | 11 |
| Eve Lights 120's | 120 mm, filter, menthol, (hard pack) | 14 | 1.1 | 11 |
| Eve Lights 120's | 120 mm, filter, (hard pack) | 13 | 1.1 | 11 |
| Kool Lights 100's | 100 mm, filter, menthol | 11 | 0.9 | 11 |
| Parliament Lights 100's | 100 mm, filter | 12 | 0.9 | 11 |
| Winston Lights | king size, filter | 11 | 0.8 | 11 |
| Merit 100's | 100 mm, filter, menthol | 9 | 0.7 | 11 |
| Belair 100's | 100 mm, filter, menthol | 9 | 0.7 | 11 |
| Salem Lights 100's | 100 mm, filter, menthol | 10 | 0.7 | 12 |
| Marlboro Lights | king size, filter, (hard pack) | 10 | 0.7 | 12 |
| Multifilter | king size, filter | 12 | 0.8 | 12 |
| Kool Super Lights 100's | 100 mm, filter, menthol | 9 | 0.7 | 12 |
| Benson & Hedges Lights 100's | 100 mm, filter, menthol | 11 | 0.8 | 12 |
| English Ovals | reg. size, non-filter, (hard pack) | 23 | 1.7 | 12 |
| Benson & Hedges Lights 100's | 100 mm, filter, menthol, (hard pack) | 11 | 0.8 | 12 |
| Camel | reg. size, non-filter | 20 | 1.3 | 12 |
| Vantage 100's | 100 mm, filter | 9 | 0.7 | 12 |
| Kent | king size, filter | 12 | 0.9 | 12 |
| Philip Morris | reg. size, non-filter | 22 | 1.4 | 12 |
| Viceroy Rich Lights 100's | 100 mm, filter | 10 | 0.8 | 12 |
| Chesterfield | reg. size, non-filter | 20 | 1.3 | 13 |
| Marlboro Lights | king size, filter | 11 | 0.8 | 13 |
| Pall Mall Light 100's | 100 mm, filter, menthol | 13 | 1.1 | 13 |
| Kent | king size, filter, (hard pack) | 13 | 0.9 | 13 |
| Merit 100's | 100 mm, filter | 11 | 0.7 | 13 |
| Raleigh Lights 100's | 100 mm, filter | 10 | 0.8 | 13 |
| Marlboro Lights 100's | 100 mm, filter | 11 | 0.8 | 13 |
| Kool Milds | king size, filter, menthol | 11 | 0.8 | 13 |
| Benson & Hedges Lights 100's | 100 mm, filter, (hard pack) | 11 | 0.8 | 13 |
| Eve Lights 100's | 100 mm, filter, menthol | 13 | 1.0 | 13 |
| Vantage | king size, filter | 9 | 0.7 | 13 |
| Vantage | king size, filter, menthol | 9 | 0.6 | 13 |
| Benson & Hedges Lights 100's | 100 mm, filter | 11 | 0.8 | 13 |
| Lark Lights | king size, filter | 14 | 1.0 | 13 |
| Benson & Hedges | king size, filter | 16 | 1.2 | 13 |
| Kent 100's | 100 mm, filter | 14 | 1.1 | 13 |

① All results below 0.5 mg. "tar," 0.05 mg. nicotine and 0.5 mg. carbon monoxide reported as <0.5, <0.05, and <0.5, respectively.

PM3001060806

OF TWO HUNDRED EIGHT (208) VARIETIES OF DOMESTIC CIGARETTES
(shown in increasing order of carbon monoxide values)

| BRAND | TYPE | TAR ^① (mg/cig) | NICOTINE ^② (mg/cig) | CARBON MONOXIDE ^③ (mg/cig) |
|----------------------------|--------------------------------------|------------------------------|-----------------------------------|---|
| Carlton | king size, filter, (hard pack) | <0.5 | <0.05 | <0.5 |
| Now | king size, filter, (hard pack) | <0.5 | 0.1 | <0.5 |
| Now 100's | 100 mm, filter, (hard pack) | <0.5 | <0.05 | <0.5 |
| Cambridge | king size, filter, (hard pack) | <0.5 | <0.05 | <0.5 |
| Carlton 100's | 100 mm, filter, menthol, (hard pack) | <0.5 | 0.1 | <0.5 |
| Barclay* | king size, filter | 1 | 0.1 | 1 |
| Carlton 100's | 100 mm, filter, (hard pack) | 1 | 0.1 | 1 |
| Tareyton Ultra Low Tar | king size, filter, menthol | 1 | 0.1 | 1 |
| Carlton | king size, filter, menthol | <0.5 | 0.1 | 1 |
| Now | king size, filter, menthol | 1 | 0.1 | 1 |
| Cambridge | king size, filter | 1 | 0.1 | 1 |
| Barclay* | king size, filter, (hard pack) | 1 | 0.2 | 1 |
| Barclay* | king size, filter, menthol | 1 | 0.1 | 1 |
| Kool Ultra*** | king size, filter, menthol | 2 | 0.2 | 1 |
| Now 100's | 100 mm, filter, menthol | 2 | 0.2 | 1 |
| Now | king size, filter | 1 | 0.1 | 1 |
| Benson & Hedges | reg. size, filter, (hard pack) | 1 | 0.1 | 2 |
| Carlton | king size, filter | 1 | 0.1 | 2 |
| Now 100's | 100 mm, filter | 2 | 0.2 | 2 |
| Kent III | king size, filter | 2 | 0.3 | 2 |
| Barclay 100's* | 100 mm, filter | 3 | 0.3 | 2 |
| Triumph | king size, filter | 2 | 0.3 | 2 |
| Barclay 100's* | 100 mm, filter, menthol | 3 | 0.3 | 3 |
| Triumph | king size, filter, menthol | 3 | 0.4 | 3 |
| Doral II | king size, filter, menthol | 4 | 0.4 | 3 |
| Iceberg 100's | 100 mm, filter, menthol | 3 | 0.3 | 4 |
| Kool Ultra 100's*** | 100 mm, filter, menthol | 4 | 0.4 | 4 |
| Merit Ultra Lights | king size, filter, menthol | 3 | 0.3 | 4 |
| Doral II | king size, filter | 4 | 0.4 | 4 |
| Merit Ultra Lights | king size, filter | 4 | 0.3 | 4 |
| Winston Ultra | king size, filter | 4 | 0.4 | 4 |
| Decade | king size, filter, menthol | 5 | 0.4 | 4 |
| Carlton 120's | 120 mm, filter | 6 | 0.6 | 4 |
| Lucky 100's | 100 mm, filter | 3 | 0.3 | 4 |
| Carlton 120's | 120 mm, filter, menthol | 6 | 0.6 | 5 |
| Tareyton Lights | king size, filter | 5 | 0.4 | 5 |
| True | king size, filter | 5 | 0.4 | 5 |
| Decade | king size, filter | 5 | 0.5 | 5 |
| Salem Ultra | king size, filter, menthol | 5 | 0.4 | 5 |
| Vantage Ultra Lights | king size, filter | 4 | 0.4 | 5 |
| Cambridge 100's | 100 mm, filter | 3 | 0.3 | 5 |
| True | king size, filter, menthol | 5 | 0.4 | 5 |
| Triumph 100's | 100 mm, filter, menthol | 4 | 0.5 | 5 |
| Carlton 100's | 100 mm, filter, menthol | 4 | 0.4 | 5 |
| Vantage Ultra Lights 100's | 100 mm, filter | 4 | 0.4 | 5 |
| L & M Lights 100's | 100 mm, filter, menthol | 8 | 0.8 | 6 |
| Carlton 100's | 100 mm, filter | 4 | 0.4 | 6 |
| Triumph 100's | 100 mm, filter | 4 | 0.5 | 6 |
| Decade 100's | 100 mm, filter | 8 | 0.7 | 6 |
| L & M Lights 100's | 100 mm, filter | 8 | 0.8 | 6 |
| Salem Ultra 100's | 100 mm, filter, menthol | 5 | 0.4 | 6 |
| Kent III 100's | 100 mm, filter | 5 | 0.5 | 6 |
| Kool Super Lights | king size, filter, menthol | 6 | 0.5 | 6 |
| Omni 100's | 100 mm, filter, menthol | 8 | 0.7 | 6 |
| Winston Ultra 100's | 100 mm, filter | 5 | 0.4 | 6 |
| Pall Mall Extra Light | king size, filter | 6 | 0.6 | 7 |
| L & M Lights | king size, filter | 9 | 0.8 | 7 |
| Tareyton Long Lights 100's | 100 mm, filter | 7 | 0.6 | 7 |
| Camel Lights | king size, filter, (hard pack) | 8 | 0.7 | 8 |

① TPM (tar)—milligrams total particulate matter less nicotine and water.

② MKilograms total alkaloids reported as nicotine.

③ All results below 0.5 mg. "tar," 0.05 mg. nicotine and 0.5 mg. carbon monoxide reported as <0.5, <0.05, and <0.5, respectively.

* See statement in text concerning Barclay.

*** See statement in text concerning Kool Ultra.

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| BRAND | TYPE | TAR [Ⓢ] (mg/cig) | NICOTINE [Ⓢ] (mg/cig) | MONOXIDE [Ⓢ] (mg/cig) |
|-----------------------------------|---|------------------------------|-----------------------------------|-----------------------------------|
| English Ovals | king size, non-filter, (hard pack) | 27 | 2.0 | 13 |
| Eve Lights 100's | 100 mm, filter | 13 | 1.0 | 13 |
| Kent 100's | 100 mm, filter, menthol | 15 | 1.2 | 14 |
| Salem 100's | 100 mm, filter, menthol | 15 | 1.1 | 14 |
| Alpine | king size, filter, menthol | 14 | 0.9 | 14 |
| Salem | king size, filter, menthol | 15 | 1.0 | 14 |
| Kool | reg. size, non-filter, menthol | 18 | 1.0 | 14 |
| Kool Milds 100's | 100 mm, filter, menthol | 12 | 0.9 | 14 |
| Virginia Slims 100's | 100 mm, filter, menthol | 15 | 1.0 | 14 |
| Picayune | reg. size, non-filter | 18 | 1.2 | 14 |
| Lark Lights 100's | 100 mm, filter | 15 | 1.1 | 14 |
| Newport Red | king size, filter, (hard pack) | 13 | 1.1 | 14 |
| Lark | king size, filter | 15 | 1.1 | 14 |
| Virginia Slims 100's | 100 mm, filter | 15 | 1.0 | 14 |
| Marlboro | king size, filter, menthol | 15 | 0.9 | 14 |
| Marlboro | king size, filter, menthol, (hard pack) | 15 | 0.9 | 14 |
| Chesterfield | king size, non-filter | 24 | 1.6 | 14 |
| Players | reg. size, non-filter, (hard pack) | 25 | 1.8 | 14 |
| Winston 100's | 100 mm, filter | 14 | 1.0 | 14 |
| St. Moritz 100's | 100 mm, filter | 15 | 1.1 | 15 |
| St. Moritz 100's | 100 mm, filter, menthol | 15 | 1.1 | 15 |
| L & M | king size, filter, (hard pack) | 14 | 1.0 | 15 |
| Camel Lights 100's | 100 mm, filter | 12 | 0.8 | 15 |
| Marlboro | king size, filter, (hard pack) | 16 | 1.1 | 15 |
| Winston Lights 100's | 100 mm, filter | 12 | 0.8 | 15 |
| Oasis | king size, filter, menthol | 15 | 1.0 | 15 |
| Philip Morris Commander | king size, non-filter | 26 | 1.7 | 15 |
| Newport Red | king size, filter | 13 | 1.0 | 15 |
| Chesterfield | king size, filter | 15 | 1.0 | 15 |
| Camel | king size, filter | 15 | 1.0 | 15 |
| Marlboro | king size, filter | 17 | 1.1 | 15 |
| Benson & Hedges 100's | 100 mm, filter, menthol, (hard pack) | 16 | 1.1 | 15 |
| Lark 100's | 100 mm, filter | 16 | 1.2 | 15 |
| Kool | king size, filter, menthol | 17 | 1.1 | 15 |
| L & M | king size, filter | 15 | 1.0 | 15 |
| Benson & Hedges 100's | 100 mm, filter, (hard pack) | 16 | 1.1 | 15 |
| Montclair | king size, filter, menthol | 15 | 1.0 | 16 |
| Saratoga 120's | 120 mm, filter, menthol, (hard pack) | 15 | 1.0 | 16 |
| Saratoga 120's | 120 mm, filter, (hard pack) | 15 | 1.0 | 16 |
| Winston | king size, filter, (hard pack) | 16 | 1.0 | 16 |
| Tareyton | king size, filter | 14 | 1.0 | 16 |
| Philip Morris International 100's | 100 mm, filter, (hard pack) | 18 | 1.1 | 16 |
| Galaxy | king size, filter | 16 | 1.0 | 16 |
| Kool Super Longs 100's | 100 mm, filter, menthol | 14 | 1.0 | 16 |
| Philip Morris International 100's | 100 mm, filter, menthol, (hard pack) | 16 | 1.0 | 16 |
| Benson & Hedges 100's | 100 mm, filter, menthol | 17 | 1.1 | 16 |
| Benson & Hedges 100's | 100 mm, filter | 17 | 1.1 | 16 |
| Lucky Strike | reg. size, non-filter | 24 | 1.5 | 16 |
| Winston | king size, filter | 15 | 1.0 | 16 |
| Long Johns 120's | 120 mm, filter, menthol | 15 | 1.3 | 16 |
| Newport | king size, filter, menthol, (hard pack) | 16 | 1.1 | 16 |
| Marlboro 100's | 100 mm, filter | 17 | 1.1 | 16 |
| Pall Mall 100's | 100 mm, filter | 16 | 1.2 | 16 |
| Pall Mall | king size, non-filter | 24 | 1.6 | 16 |
| L & M 100's | 100 mm, filter | 15 | 1.1 | 16 |
| Half & Half | king size, filter | 18 | 1.4 | 16 |
| Chesterfield 100 | 100 mm, filter | 15 | 1.1 | 17 |
| Old Gold Straight | king size, non-filter | 26 | 1.6 | 17 |
| Max 120's | 120 mm, filter, menthol | 18 | 1.5 | 17 |
| Tareyton 100's | 100 mm, filter | 15 | 1.1 | 17 |
| Marlboro 100's | 100 mm, filter, (hard pack) | 17 | 1.1 | 17 |
| Kool | king size, filter, menthol, (hard pack) | 16 | 1.1 | 17 |
| Raleigh | king size, non-filter | 23 | 1.3 | 17 |
| Viceroy | king size, filter | 15 | 0.9 | 17 |
| Winston International 100's | 100 mm, filter, (hard pack) | 18 | 1.3 | 17 |
| Raleigh | king size, filter | 16 | 1.0 | 17 |

[Ⓢ] All results below 0.5 mg. "tar," 0.05 mg. nicotine and 0.5 mg. carbon monoxide reported as <0.5, <0.05, and <0.5, respectively.

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| BRAND | TYPE | TAR [Ⓢ] (mg/cig) | NICOTINE [Ⓢ] (mg/cig) | CARBON MONOXIDE (mg/cig) |
|---------------------------|--------------------------------|------------------------------|-----------------------------------|--------------------------------|
| Newport | king size, filter, menthol | 17 | 1.2 | 17 |
| Tall 120's | 120 mm, filter, menthol | 17 | 1.3 | 18 |
| DuMaurier | king size, filter, (hard pack) | 16 | 1.0 | 18 |
| Viceroy Super Longs 100's | 100 mm, filter | 15 | 1.0 | 18 |
| Max 120's | 120 mm, filter | 19 | 1.5 | 18 |
| Spring 100's | 100 mm, filter, menthol | 20 | 1.1 | 18 |
| Raleigh 100's | 100 mm, filter | 17 | 1.0 | 18 |
| Pall Mall | king size, filter | 18 | 1.2 | 18 |
| Old Gold Filter | king size, filter | 17 | 1.3 | 18 |
| Herbert Tareyton | king size, non-filter | 28 | 1.8 | 19 |
| Long Johns 120's | 120 mm, filter | 19 | 1.5 | 19 |
| More 120's | 120 mm, filter, menthol | 16 | 1.2 | 19 |
| Old Gold Filter 100's | 100 mm, filter | 20 | 1.5 | 19 |
| Tall 120's | 120 mm, filter | 19 | 1.5 | 19 |
| Newport 100's | 100 mm, filter, menthol | 20 | 1.4 | 20 |
| More 120's | 120 mm, filter | 17 | 1.2 | 21 |
| Bull Durham | king size, filter | 30 | 2.0 | 23 |

② All results below 0.5 mg. "tar," 0.05 mg. nicotine and 0.5 mg. carbon monoxide reported as <0.5, <0.05, and <0.5, respectively.

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